

ITEM 1: CHAIR'S REPORT

No Attachments

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** October 8, 2009

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 2a
Item- Yerba Buena Island (YBI) Ramps Update
Contribution Agreement

Recommendation:
APPROVAL

Cost:

YBITS No. 1 Addendum: \$715,000.00 (est)
YBI Ramps Project Oversight: \$750,000.00 (cap)

Schedule Impacts:

N/A

Discussion:

On October 16, representatives from the City/ County of San Francisco will provide the TBPOC an update on the Yerba Buena Island (YBI) Ramps Project, as it relates to the YBITS No. 1 contract. Representatives will include:

- Jack Sylvan - Mayor's Office
- Eileen Goodwin - Consultant to Mayor's Office
- Craig Chatelain – AECOM, PA/ED consultant to SFCTA
- Eric Cordoba - SFCTA YBI Ramps Project Manager

The TBPOC is requested to approve:

1. Draft YBI Ramps Cooperative Agreement #4-2283 for Addendum Reimbursement (Attachment 1)
2. Draft YBI Ramps Cooperative Agreement #4-2137 for State Oversight Services (Attachment 2)

The City's presentation will entail:

YBI Ramps Project Update

1. Environmental technical reports substantially complete
2. Draft PR/ED submittal to Caltrans (early Oct. 2009)
3. Draft ED public circulation start target date (Dec. 2009)
4. ED approval (April 2010)
5. HBP Funding applications submitted to Caltrans (August 2009)

YBI Ramps Cooperative Agreements

1. COOP Agreement Principles
 - a. YBITS # 1 Addendum - \$715,000 Est.
 - b. Project Oversight - \$750,000 Cap
2. SFCTA Approval Process
 - a. Citizen Advisory Committee – Motion of Support (9/23/09)
 - b. Finance Committee (10/6/09)
 - c. Board (10/27/09)

Request TBPOC Approve/ Support:

1. Issuance of YBITS # 1 Addendum
2. Execution of YBI Ramps Cooperative Agreements

Attachment(s):

1. Draft YBI Ramps Cooperative Agreement #4-2283 for Addendum Reimbursement
2. Draft YBI Ramps Cooperative Agreement #4-2137 for State Oversight Services

9/30/09
ES

04-SF-80 KP 12.6/13.1 (PM 7.6/8.1)
Yerba Buena Island Connector Ramps
04242-3A640K
District Agreement No. 4-2283

COOPERATIVE AGREEMENT

THIS AGREEMENT, ENTERED INTO EFFECTIVE ON _____, 2009, is between the STATE OF CALIFORNIA, acting by and through its Department of Transportation, referred to herein as "STATE," and the

SAN FRANCISCO COUNTY TRANSPORTATION
AUTHORITY, a public corporation, referred to
herein as "AUTHORITY".

RECITALS

1. STATE and AUTHORITY, pursuant to Streets and Highways Code section 114 and 131, are authorized to enter into a Cooperative Agreement for improvements to State and local highways within the City and County of San Francisco.
2. STATE is constructing the new San Francisco-Oakland Bay Bridge (SFOBB) Transition Structure, referred to herein as "IMPROVEMENTS" as part of the East Span Seismic Safety Project. To accommodate the construction of the new Yerba Buena Island (YBI) ramps, which comprises of a new westbound onramp connecting to the new SFOBB East Span just prior to the tunnel and a new westbound off-ramp connecting to the new SFOBB East Span between bents W3 and W4, AUTHORITY requests to add additional steel reinforcements and steel couplers to accommodate the future connection of the new ramps along with loop detectors to the new SFOBB East Span, referred to herein as "BETTERMENTS." The additional reinforcement would be constructed via contract addendum to the YBI Transition Structure #1 Contract (Contract 04-0120S4).
3. AUTHORITY has prepared contract plans for BETTERMENTS and desires to have STATE administer the construction contract for BETTERMENTS.
4. It is mutually beneficial to combine said IMPROVEMENTS and BETTERMENTS into a single construction contract, referred to herein as "PROJECT."
5. AUTHORITY is willing to pay for all actual construction capital costs and a not to exceed lump sum amount for support costs that will be incurred by STATE to construct BETTERMENTS on AUTHORITY's behalf.
6. The parties now desire to specify herein below the terms and conditions under which BETTERMENTS are to be financed and constructed.

SECTION I

STATE AGREES:

1. To review and approve all plans, specifications and estimates (PS&E) prepared by AUTHORITY for BETTERMENTS portion of PROJECT.

2. To prepare PS&E for IMPROVEMENTS and to provide construction engineering services for PROJECT.
3. To construct PROJECT in accordance with PS&E prepared by AUTHORITY and STATE.
4. To advertise, award, and administer the construction contract for BETTERMENTS as a part of PROJECT.
5. To establish separate PROJECT accounts to accumulate charges for all costs to be paid by AUTHORITY pursuant to this Agreement as shown in Exhibit A, attached to and made a part of this Agreement.
6. To submit a billing in the lump sum amount of \$65,000 to AUTHORITY fifteen (15) days prior to STATE's bid advertising date of a construction contract for PROJECT. Said billing shall represent AUTHORITY's not to exceed contribution towards cost of construction support for BETTERMENTS as described in Article 1 of Section II and shown on Exhibit A.
7. To submit a maximum initial billing in the amount of \$650,600 to AUTHORITY thirty (30) days prior to STATE's award date of a construction contract for PROJECT. Initial billing amount to be determined and agreed to upon receipt and analysis of contractor bids. Said initial billing represents AUTHORITY's deposit for the total estimated construction capital cost for BETTERMENTS, exclusive of claims and excluding costs referred to in Section II, Article 2.
8. To make all necessary arrangements with the owners of public or private utility facilities which could conflict with construction of BETTERMENTS in accordance with applicable law, the provisions of any franchise, master contracts or other agreements in effect with the respective utility owners. STATE shall prepare the necessary notices and/or Utility Agreements to relocate and inspect the required utility relocation work.
9. To pay for utility adjustments, including engineering and overhead costs, for the IMPROVEMENTS portion of PROJECT only.
10. Upon completion of PROJECT and all work incidental thereto, to furnish AUTHORITY with a detailed statement of the total actual BETTERMENTS costs, including the costs of any claims related to the construction contract which have been allowed to the construction contractor pursuant to the construction contract administrative claims process or arbitration and all claims-related defense costs incurred by STATE. STATE thereafter shall refund to AUTHORITY promptly after completion of STATE's final accounting of costs for BETTERMENTS any amount of AUTHORITY's construction capital payments remaining after actual costs to be borne by AUTHORITY have been deducted or STATE shall invoice AUTHORITY for any additional amounts required to complete AUTHORITY's financial obligations assumed pursuant to this Agreement.
11. To retain, or cause to be retained for audit by AUTHORITY's auditors, for a period of three (3) years from date of processing the final payment under this Agreement, all records and accounts relating to BETTERMENTS, and make such materials available at STATE's District 4 Office and copies thereof shall be furnished to AUTHORITY, if requested by AUTHORITY.

SECTION II

AUTHORITY AGREES:

1. To deposit with STATE within twenty-five (25) days of receipt of billing therefor (which billing will be forwarded fifteen (15) days prior to STATE's bid opening date of a construction contract for PROJECT), the lump sum amount of \$65,000. Said figure represents AUTHORITY's not to exceed contribution towards cost of construction support work for BETTERMENTS. Said BETTERMENTS support costs shall include costs of providing personnel resources and their equipment and all direct and indirect costs (functional and administrative overhead assessment) attributable to BETTERMENTS support applied in accordance with STATE's standard accounting practices and procedures. AUTHORITY agrees that this lump sum amount is not to be construed as a percentage of the construction capital cost estimate to be used for negotiations to reimburse STATE's support costs on future agreement(s).
2. To bear one hundred percent (100%) of the total actual BETTERMENTS capital construction cost, estimated to be \$650,600, including the cost of materials furnished by STATE, supplemental work, change orders, claims related solely to the construction contract for the BETTERMENTS paid to the construction contractor, including those paid as a result of STATE's administrative claims process and/or as an award in arbitration, and the cost of STATE's defense of all PROJECT-related claims due solely to BETTERMENTS which may be filed by said contractor. The actual capital construction costs of BETTERMENTS shall be determined only after completion of all work, the closure of all claims, and upon final accounting of all costs for PROJECT.
3. To deposit with STATE within twenty-five (25) days of receipt of billing therefor, (which billing will be forwarded thirty (30) days prior to STATE's award date of a construction contract for PROJECT), the amount of \$650,600, which figure represents AUTHORITY's initial deposit for the total estimated construction capital cost for BETTERMENTS,, exclusive of claims and excluding costs referred to in Article 7 of this Section II.
4. To prepare all plans for BETTERMENTS, at AUTHORITY expense, and to submit each to STATE for review and approval for compatibility with STATE's IMPROVEMENTS plans.
5. To identify and locate all utility facilities within the BETTERMENTS area as part of its design responsibility. All facilities not relocated or removed in advance of PROJECT construction shall be identified on the PROJECT plans and specifications.
6. To pay for utility adjustments made by STATE to accommodate construction of BETTERMENTS, including STATE's engineering and overhead costs.
7. If any additional or extra work over and above that specifically provided for herein to construct BETTERMENTS is needed, such work shall be at AUTHORITY's sole expense and be accomplished by an executed Amendment to this agreement for a construction contract change order or any other method deemed appropriate by STATE after receipt of deposit of funds by AUTHORITY to cover the cost of such work.
8. To pay STATE upon completion of all work and within twenty-five (25) working days of receipt of a detailed statement made upon final accounting of construction costs therefore, any amount over and above the aforementioned deposits and payments required to complete AUTHORITY's financial obligation undertaken pursuant to this Agreement.

SECTION III

IT IS MUTUALLY AGREED:

1. STATE's contractual obligations are subject to the annual State Budget Act authority, the appropriation of appropriate resources by the Legislature, and the allocation of required funds by the California Transportation Commission.
2. AUTHORITY's total obligation for the cost of BETTERMENTS, including the \$65,000 not to exceed lump sum obligation for construction support costs is estimated at \$715,600. The total obligation may be increased to cover actual construction capital costs in excess of the initial estimated total construction capital costs of BETTERMENTS. Such increase in total obligation will be incorporated only upon written amendment to this Agreement.
3. If the expenses for the BETTERMENTS goes beyond the AUTHORITY's named estimated contribution, STATE shall stop work on BETTERMENTS and restore the site to a condition of safe operation, using any then unexpended funds for BETTERMENTS until additional funds are procured and made available for BETTERMENTS and this Agreement is amended accordingly. Similarly, STATE is under no obligation to continue work on BETTERMENTS if AUTHORITY fails to pay STATE's invoices under Section II.
4. STATE shall not award a contract to construct PROJECT until this Agreement is fully executed and after receipt of AUTHORITY's deposits required in Section II of this Agreement
5. Prior to advertising for bids for the construction contract for PROJECT, AUTHORITY may terminate this Agreement by written notice, provided that AUTHORITY pays STATE for all costs already incurred, including work performed by STATE prior to the effective date of this agreement, and all unavoidable costs related to termination of BETTERMENTS under the terms of this agreement.
6. After opening bids for construction of PROJECT, AUTHORITY's estimate of construction capital cost will be revised based on actual bid prices. AUTHORITY's required deposit under Section II, Article 3 will be increased or decreased to match said revised estimate. If the deposit increase or decrease is less than \$5,000, no refund or demand for additional deposit will be made until final accounting.
7. The cost of any construction engineering referred to herein in this Agreement shall include all direct and indirect costs (functional and administrative overhead assessment) attributable to such work, applied in accordance with STATE's standard accounting practices.
8. Construction of BETTERMENTS referred to herein may require alterations, deviations, additions to or omissions from STATE's PS&E, including an increase or decrease of quantities in items of work. Any such changes shall be accomplished in accordance with STATE's Standard Specifications and Special Provisions in STATE's construction contract. STATE shall proceed with all changes to BETTERMENTS as needed to construct PROJECT up to an aggregate amount of \$10,000 without notifying AUTHORITY's representative before authorizing contractor to begin work on these changes. STATE will notify AUTHORITY's representative and solicit comments before authorizing contractor to begin work on changes above the aggregate amount of \$10,000 and AUTHORITY shall have all comments returned to STATE within three (3) working days for STATE to consider those comments, if any.
9. STATE grants to AUTHORITY or its representatives, at no cost to STATE, the right to

inspect the BETTERMENTS portion of PROJECT as it progresses. Upon completion of BETTERMENTS construction, AUTHORITY reserves the right to perform an independent final inspection of BETTERMENTS.

10. In the construction of PROJECT, AUTHORITY may at no cost to STATE, furnish a representative, if it so desires. AUTHORITY's assigned representative shall have no direct contact with STATE's contractor, the public, other local agencies, etc., without prior consent of STATE's Resident Engineer. Said representative and STATE's Engineer will cooperate and consult with each other, but the decisions of STATE's Resident Engineer shall prevail as final, binding and conclusive in all matters concerning the PROJECT construction contract.
11. STATE shall designate a Project Manager to represent STATE and AUTHORITY shall designate in writing a representative through whom all communications between the two agencies shall be channeled.
12. STATE's construction contract claims process will be used with STATE acting as the lead agency in consultation with AUTHORITY. AUTHORITY shall abide by the outcome of said claims process. In the event that arbitration under the provisions of Public Contract Code section 10240 et seq. results from the contract claims process, STATE will act as lead agency in Arbitration unless otherwise agreed by STATE and AUTHORITY.
13. If unanticipated cultural, archaeological, paleontological or other protected materials or resources are encountered during PROJECT construction, STATE shall stop work in that area until a qualified professional can evaluate the nature and significance of the find and a plan is approved for the removal or protection of that material. The costs for any removal or protection of that material in the BETTERMENTS shall be covered as a BETTERMENTS cost contemplated by this Agreement.
14. The party that discovers HM will immediately notify the other party to this Agreement.

HM-1 is defined as hazardous material (including but not limited to hazardous waste) that requires removal and disposal pursuant to federal or state law, whether it is disturbed by PROJECT or not.

HM-2 is defined as hazardous material (including but not limited to hazardous waste) that may require removal and disposal pursuant to federal or state law, only if disturbed by PROJECT.

15. STATE, independent of PROJECT, is responsible for any HM-1 found within existing SHS right of way. STATE will undertake HM-1 management activities with minimum impact to PROJECT schedule and will pay all costs associated with HM-1 management activities.

STATE has no responsibility for management activities or costs associated with HM-1 found outside the existing SHS right of way. If HM-1 is found outside existing SHS right of way, responsibility for such HM-1 rests with the owner(s) of the parcel(s) on which the HM-1 is found. AUTHORITY, in concert with the local agency having land use jurisdiction over the parcel(s), will ensure that HM-1 management activities are undertaken with minimum impact to PROJECT schedule.

16. If HM-2 is found within the limits of PROJECT, the public agency responsible for advertisement, award, and administration (AAA) of the PROJECT construction contract

will be responsible for HM-2 management activities. Any management activity cost associated with HM-2 is a PROJECT construction cost.

17. Management activities associated with either HM-1 or HM-2 include, without limitation, any necessary manifest requirements and designation of disposal facility.
18. STATE'S acquisition of or acceptance of title to any property on which any hazardous material is found will proceed in accordance with STATE'S policy on such acquisition.
19. If, during the performance of PROJECT construction, new information is obtained which requires the preparation of additional environmental documentation pertaining to BETTERMENTS to comply with CEQA and if applicable, NEPA, this Agreement will be amended to include completion of those additional tasks.
20. Upon completion and acceptance of the PROJECT construction contract by STATE, STATE will accept control of and maintain BETTERMENTS at its own cost and expense.
21. Upon completion of STATE's PROJECT, ownership and title to materials, equipment, and appurtenances installed within the SHS right of way for SHS operations will automatically be vested in STATE, and materials, equipment, and appurtenances installed outside of the SHS right of way will automatically be deemed to be under the control of AUTHORITY or an appropriate third party as determined by AUTHORITY. No further agreement will be necessary to transfer ownership as hereinbefore stated.
22. Nothing in the provisions of this Agreement is intended to create duties or obligations to or rights in third parties not parties to this Agreement or to affect the legal liability of either party to the Agreement by imposing any standard of care with respect to the development, design, construction, operation or maintenance of the SHS and the AUTHORITY BETTERMENTS different from the standard of care imposed by law.
23. Neither STATE nor any officer or employee thereof is responsible for any injury, damage or liability occurring by reason of anything done or omitted to be done by AUTHORITY under or in connection with any work, authority or jurisdiction conferred upon AUTHORITY under this Agreement. It is understood and agreed that AUTHORITY will fully defend, indemnify and save harmless STATE and all its officers and employees from all claims, suits or actions of every name, kind and description brought forth under, including, but not limited to, tortious, contractual, inverse condemnation or other theories or assertions of liability occurring by reason of anything done or omitted to be done by AUTHORITY under this Agreement.
24. Neither AUTHORITY nor any officer or employee thereof is responsible for any injury, damage or liability occurring by reason of anything done or omitted to be done by STATE under or in connection with any work, authority, or jurisdiction conferred upon STATE under this Agreement. It is understood and agreed that STATE will fully defend, indemnify and save harmless AUTHORITY and all its officers and employees from all claims, suits or actions of every name, kind and description brought forth under, including, but not limited to, tortious, contractual, inverse condemnation or other theories or assertions of liability occurring by reason of anything done or omitted to be done by STATE under this Agreement.
25. No alteration or variation of the terms of this Agreement shall be valid unless made in writing and signed by the parties hereto by way of an amendment and no oral understanding or agreement not incorporated herein shall be binding on any of the parties hereto.

26. This Agreement may be terminated or provisions contained herein may be altered, changed, or amended by mutual consent of the parties hereto.
27. Except as otherwise provided in Article 5, of this Section III, those portions of Agreement pertaining to the construction of BETTERMENTS shall terminate upon completion and acceptance of the construction contract for PROJECT by STATE, or on December 31, 2014, whichever is earlier in time; however, the ownership, operation, maintenance, liability, and claims clauses shall remain in effect until terminated or modified in writing, by mutual agreement. Should any construction-related claim arising out of PROJECT be asserted against STATE, AUTHORITY agrees to extend the termination date of this Agreement and provide additional funding as required to cover AUTHORITY's proportionate share of costs or execute a subsequent agreement to cover those eventualities.
28. Except as otherwise specifically provided in this Agreement, wherever in this Agreement STATE or AUTHORITY is required or requested to give its consent or approval to any matter or action by the other, such consent or approval shall not be unreasonably withheld or delayed and the reasons for disapproval of consent shall be stated in reasonable detail in writing.

STATE OF CALIFORNIA
Department of Transportation

SAN FRANCISCO COUNTY
TRANSPORTATION AUTHORITY

RANDELL H. IWASAKI
Director

By: _____
Deputy District Director

By: _____
Jose Luis Moscovich
Executive Director

Approved as to form and procedure:

Attorney
Department of Transportation

Attest: _____
AUTHORITY Clerk

Certified as to budgeting of funds:

Recommended for approval:

District Budget Manager

Lee Saage
Deputy Director, Capital Projects

Certified as to financial terms and

Approved as to form:

conditions:

Accounting Administrator

AUTHORITY Legal Counsel

EXHIBIT A

COST OF AUTHORITY's BETTERMENTS WORK TO BE PERFORMED BY STATE

REIMBURSED WORK	LUMP SUM	ESTIMATE	TOTAL
CONSTRUCTION SUPPORT	\$65,000		
CONSTRUCTION CAPITAL		\$650,600	
TOTAL	\$65,000	\$650,600	\$715,600

COOPERATIVE AGREEMENT

This AGREEMENT, entered into effective on _____, 2009, is between the STATE OF CALIFORNIA, acting by and through its Department of Transportation, referred to herein as "STATE," and the

SAN FRANCISCO COUNTY
TRANSPORTATION AUTHORITY,
referred herein as "AUTHORITY."

RECITALS

1. STATE and AUTHORITY, pursuant to Streets and Highways Code sections 114 and 130, are authorized to enter into a Cooperative Agreement for improvements to the State Highway System (SHS) within AUTHORITY's jurisdiction.
2. AUTHORITY desires State Highway improvements consisting of the reconstruction of two (2) ramps on the east side of Yerba Buena Island (YBI), which connect YBI with the San Francisco-Oakland Bay Bridge (SFOBB) on Interstate Route 80, in the City and County of San Francisco (CITY), referred to herein as "PROJECT."
3. In October 2007, the Governor signed Senate Bill 163, which includes legislative findings that (i) it is in the interest of the well-being of the traveling public in the State to bring the ramps connecting YBI to the SFOBB under the ownership and control of STATE, and to ensure the reconstruction of those ramps according to contemporary design standards, and (ii) it is in the best interest of the traveling public to begin work on the ramps as soon as possible in order to coordinate this work with the design and construction of the East Span Seismic Safety Project (ESSSP). STATE will only accept ownership and control of those ramps that meet current seismic safety standards. The ramps on the west side of YBI do not meet current seismic safety standards and will not be owned or controlled by STATE.
4. Senate Bill 163 requires STATE to work in cooperation with the Treasure Island Development Authority (TIDA) and AUTHORITY on the design and engineering of replacement ramps connecting YBI to the SFOBB and to ensure that the design of the ramps is compatible with the design of the new Eastern Span. Senate Bill 163 also authorizes STATE, upon the transfer to TIDA from the Federal Government of the ramp connections, to accept from TIDA title, easements, and other interests in land necessary for STATE to own and operate one or more of the ramps, contingent upon completion of work on the ramps in accordance with specified standards.

5. In accordance with Senate Bill 163, AUTHORITY, CITY and TIDA have been coordinating with STATE and the Toll Bridge Program Oversight Committee (TBPOC) regarding the design and engineering of the YBI ramps, and STATE and TBPOC have indicated their support for constructing the PROJECT concurrent with or as part of the ESSSP based on the following parameters: (i) construction of the PROJECT shall happen as soon as possible without impacting the schedule of the ESSSP, (ii) the funding solution for the PROJECT shall be a collaborative effort but shall not increase the costs of the ESSSP, and (iii) construction of the PROJECT shall not adversely impact the lifeline status of the ESSSP.
6. The Project Study Report (PSR) for the YBI ramps, which was prepared by AUTHORITY in coordination with TIDA, CITY and STATE, was approved and signed by STATE on December 19, 2007.
7. The PSR evaluated several ramp design alternatives and recommends two project alternatives, and a no-build alternative, to be further studied and analyzed in the Project Approval and Environmental Document (PA&ED) phase of the PROJECT. For the purposes of this Agreement, the PA&ED phase is defined as the work necessary to perform environmental studies and prepare the environmental documentation in order to obtain project approvals and permits for the PROJECT.
8. Completion of the PA&ED on a timely basis is imperative so that the new ramp designs can be incorporated into the ESSSP for the SFOBB so that construction of the PROJECT will not delay any aspect of the ESSSP, increase the costs of the ESSSP, or adversely impact the lifeline status of the ESSSP.
9. AUTHORITY is willing to fund one hundred percent (100%) of all support costs, except that the costs of STATE's Independent Quality Assurance (IQA) of PROJECT PA&ED, Plans Specifications and Estimates (PS&E), Right of Way (R/W), all hereinafter referred to as PROJECT DEVELOPMENT and STATE's costs incurred as the National Environmental Policy Act (NEPA) Lead Agency, if applicable, in the review, comment, and approval, if appropriate, of the PROJECT environmental documentation prepared entirely by AUTHORITY, will be borne by STATE.
10. All support costs of PROJECT DEVELOPMENT, are defined as PROJECT costs.
11. AUTHORITY desires to have STATE perform certain services for PROJECT beyond STATE's IQA, referred to herein as "STATE SERVICES" for a cost of \$750,000. STATE is agreeable to provide STATE SERVICES to AUTHORITY.
12. AUTHORITY has been delegated as the CEQA Lead Agency by the approved Project Study Report (PSR).
13. STATE funds will not be used to finance any of the PROJECT DEVELOPMENT capital and support costs except as set forth in this Agreement.
14. The terms of this Agreement shall supersede any inconsistent terms of any prior Memorandum of Understanding (MOU) or agreement relating to PROJECT.
15. PROJECT landscape maintenance and construction will be the subject of a separate future agreement or agreements.
16. This Agreement will define roles and responsibilities of the CEQA Lead Agency and CEQA Responsible Agency regarding environmental documentation, studies, and

reports necessary for compliance with CEQA. This Agreement will also define roles and responsibilities for compliance with NEPA, if applicable.

17. The parties now define hereinbelow the terms and conditions under which PROJECT is to be developed, designed and financed.

SECTION I

AUTHORITY AGREES:

1. To fund one hundred percent (100%) of all PROJECT DEVELOPMENT support costs except for costs of STATE's IQA, and STATE's review, comment, and approval, if appropriate, of the PROJECT environmental documentation for NEPA if applicable.
2. To not use STATE funds for any PROJECT capital and support costs except as set forth in this Agreement.
3. To have STATE perform STATE SERVICES for PROJECT at AUTHORITY's expense.
4. To reimburse STATE for the cost of STATE SERVICES, in the amount of \$750,000. Said costs of STATE SERVICES shall include costs of providing personnel resources and their equipment and all direct and indirect costs (functional and administrative overhead assessments directly attributable to STATE SERVICES applied in accordance with STATE's standard accounting procedures).
5. To deposit with STATE within twenty-five (25) days of receipt of billing therefor (which billing will be forwarded within thirty (30) days of execution of this Agreement) the amount of \$250,000, representing the first of three (3) payments for expenditures for STATE SERVICES. Thereafter, to deposit with STATE within twenty-five (25) days of receipt of billing therefor (which two (2) additional billings will be forwarded to AUTHORITY, one (1) year after execution of this Agreement, in the amount of \$250,000, and the final billing, two (2) years after execution of this Agreement, in the amount of \$250,000).
6. All PROJECT work performed by AUTHORITY, or performed on AUTHORITY's behalf, shall be performed in accordance with all State and Federal laws, regulations, policies, procedures, and standards that STATE would normally follow. All such PROJECT work shall be submitted to STATE for STATE's review, comment, and concurrence at appropriate stages of development.
7. That changes to the SFOBB bridge system shall be reported to, and approved by the STATE. Furthermore, any changes to seismic response of the SFOBB will be reviewed by the STATE and the Toll Bridge Seismic Safety Peer Review Panel.
8. All PROJECT work, except as set forth in this Agreement, is to be performed by AUTHORITY. Should AUTHORITY request that STATE perform any portion of PROJECT work, except as otherwise set forth in this Agreement, AUTHORITY shall first agree to reimburse STATE for such work pursuant to an amendment to this Agreement or a separate executed Agreement.
9. To have all necessary environmental documentation and PS&E prepared, at no cost to STATE (other than costs relating to STATE's IQA), and to submit each to STATE for

STATE's review, concurrence, and/or approval at appropriate stages of development. Final PS&E for PROJECT shall be signed by a Civil Engineer registered in the State of California.

10. To have all necessary right of way maps and documents used to acquire right of way by AUTHORITY prepared by or under the direction of a person authorized to practice land surveying in the State of California. Each right of way map and document shall bear the appropriate professional seal, certificate number, expiration date of registration certification and signature of the licensed person in Responsible Charge of Work.
11. To permit STATE to monitor, participate, and oversee the selection of personnel who will prepare the Project Report (PR), prepare the environmental documentation, including the investigative studies and technical environmental reports, prepare the PS&E, provide right of way engineering services, and provide right of way acquisition services for PROJECT. AUTHORITY agrees to consider any request by STATE to avoid a contract award or discontinue the services of any personnel considered by STATE to be unqualified on the basis of credentials, professional expertise, failure to perform, and/or other pertinent criteria.
12. To submit to STATE for review, comment, concurrence, and/or approval all Right of Way Engineering Land-Net Maps and Right of Way Appraisal Maps, Records of Survey, and Right of Way Record Maps all prepared in accordance with STATE's Right of Way Manual, Chapter 6, Right of Way Engineering, STATE's Plans Preparation Manual, STATE's Surveys Manual, applicable State laws, and other pertinent reference materials and examples as provided by STATE.
13. AUTHORITY shall include a "conflict of interest" requirement in the PROJECT design consultant contract(s) that prohibits the design consultant from being employed or under contract to the future PROJECT construction contractor.
14. Personnel who prepare right of way maps, documents, and related materials shall be made available to STATE, at no cost to STATE, during and after construction of PROJECT until completion and acceptance by STATE of Right of Way Record Maps, Records of Survey, and title to any property intended to be transferred to STATE.
15. To make written application to STATE for necessary encroachment permits authorizing entry of AUTHORITY onto the SHS right of way to perform required PROJECT DEVELOPMENT work as more specifically defined elsewhere in this Agreement. AUTHORITY shall also require AUTHORITY's consultants and contractors to make written application to STATE for the same necessary encroachment permits.
16. To identify and locate all utility facilities within the area of PROJECT as part of the design responsibility for PROJECT. All utility facilities not relocated or removed in advance of construction shall be identified on the PS&E for PROJECT.
17. If any existing utility facilities conflict with the construction of PROJECT or violate STATE's encroachment policy, AUTHORITY shall make all necessary arrangements with the owners of such facilities for their timely accommodation, protection, relocation, or removal.

The costs for the PROJECT's positive identification and location, protection, relocation, or removal of utility facilities whether inside or outside SHS right of way shall be determined in accordance with Federal and California laws and regulations, and

STATE's policies and procedures, standards, practices, and applicable agreements including, but not limited to, Freeway Master Contracts.

18. To furnish evidence to STATE, in a form acceptable to STATE, that arrangements have been made for the protection, relocation, or removal of all conflicting facilities within SHS right of way and that such work will be completed prior to award of the contract to construct PROJECT or as covered in the PS&E for said contract. This evidence shall include a reference to all required SHS encroachment permits.
19. To acquire and furnish all right of way, if any, outside of existing SHS right of way and to perform all right of way activities, including all eminent domain activities, if necessary, at no cost to STATE, and in accordance with procedures acceptable to STATE. These activities shall comply with all applicable State and Federal laws and regulations, subject to STATE's IQA to ensure that completed work and title to property acquired for PROJECT is acceptable for incorporation into the SHS right of way.
20. To utilize the services of a qualified public agency or a qualified consultant, as determined by STATE's District Division Chief of Right of Way, in all matters related to acquisition of right of way in accordance with STATE's procedures as published in STATE's current Right of Way Manual. Whenever personnel other than personnel of a qualified public agency, or a qualified consultant, are utilized, administration of the personnel contract shall be performed by a qualified Right of Way person employed or retained by AUTHORITY.
21. To certify legal and physical control of right of way ready for construction and that all right of way parcels were acquired in accordance with applicable State and Federal laws and regulations, subject to review, comment, concurrence, and/or approval by STATE prior to the advertisement for bids for the contract to construct PROJECT.
22. To deliver to STATE legal title to the right of way, including access rights, free and clear of all encumbrances detrimental to STATE's present and future uses not later than the date of acceptance by STATE of maintenance and operation of the SHS facility. Acceptance of said title by STATE is subject to a review of a Policy of Title Insurance in the name of the State of California to be provided and paid for by AUTHORITY.
23. To be responsible for, and to the STATE's satisfaction, the investigation of potential hazardous material sites within and outside existing SHS right of way that could impact the PROJECT as part of performing any preliminary engineering work. If AUTHORITY discovers hazardous material or contamination within the PROJECT study area during said investigation, AUTHORITY shall immediately notify STATE.
24. If AUTHORITY desires to have STATE advertise, award, and administer the construction contract for PROJECT, AUTHORITY shall provide STATE with plans in a format acceptable to STATE. Reimbursement to STATE for costs incurred by STATE to advertisement, award, and administration of the construction contract for PROJECT will be covered in the separate Cooperative Agreement.
25. All aerial photography and photogrammetric mapping shall conform to STATE's current standards.
26. A copy of all original survey documents resulting from surveys performed for PROJECT, including original field notes, adjustment calculations, final results, and appropriate intermediate documents, shall be delivered to STATE and shall become property of STATE when the STATE takes control of the ramps. For aerial mapping, all information and materials listed in the document "Materials Needed to Review

Consultant Photogrammetric Mapping” shall be delivered to STATE and shall become property of STATE.

27. All original recorded land title documents created by PROJECT shall be delivered to STATE and become property of STATE.
28. To submit to STATE a list of STATE horizontal and vertical control monuments which will be used to control surveying activities for PROJECT.
29. To obtain (San Francisco) Bay Conservation and Development Commission (BCDC) approval for PROJECT, if required.
30. To have a detailed structural analysis done to determine how the PROJECT ramps can be connected to the YBI Transition Structure, and submit analysis to STATE for reviews, comments, concurrence, and/or approvals as appropriate by STATE and Seismic Advisory Board (SAB).
31. AUTHORITY shall obtain an exception to policy (DD-12-R1, English units as the preferred system of units and measures), to allow PROJECT to be designed in metric units consistent with the ESSSP.

SECTION II

STATE AGREES:

1. At no cost to AUTHORITY, to complete STATE’s review, comment, and approval, if appropriate, as NEPA Lead Agency, if applicable, of the environmental documentation prepared entirely by AUTHORITY and to provide IQA of all AUTHORITY PROJECT DEVELOPMENT work necessary for completion of the PR and PS&E for PROJECT done by AUTHORITY, including, but not limited to, investigation of potential hazardous material sites and all right of way activities undertaken by AUTHORITY or its designee, and provide prompt reviews, comments, concurrence, and/or approvals as appropriate, of submittals by AUTHORITY, while cooperating in timely processing of documents necessary for completion of the environmental documentation, PR and PS&E for PROJECT.
2. To perform STATE SERVICES for PROJECT beyond STATE’s IQA, at AUTHORITY’s expense, in the amount of \$750,000.
3. Within thirty (30) days of execution of this Agreement, to submit a billing in the amount of \$250,000 to AUTHORITY, representing the first of three (3) billings for expenditures for STATE SERVICES. Thereafter, to submit a second billing to AUTHORITY, one (1) year after execution of this Agreement, in the amount of \$250,000. Thereafter, to submit a third and final billing to AUTHORITY, two (2) years after execution of this Agreement, in the amount of \$250,000.
4. To issue, upon proper application and at no cost to AUTHORITY, an encroachment permit required for work within SHS R/W. Any third party agent (including but not limited to contractors, consultants, and utility owners) must obtain an encroachment permit issued in their name, prior to performing any work within the SHS R/W. All third party agents may be subject to an encroachment permit fee assessment.

5. To cooperate with AUTHORITY, TIDA and CITY, in identifying available funding sources for the construction of the PROJECT.

SECTION III

IT IS MUTUALLY AGREED:

1. All obligations of STATE under the terms of this Agreement are subject to the appropriation of resources by the Legislature, State Budget Act authority and the allocation of funds by the California Transportation Commission (CTC).
2. The parties to this Agreement understand and agree that STATE's IQA is defined as providing STATE policy and procedural guidance through to completion of the PROJECT administered by AUTHORITY. This guidance includes prompt reviews by STATE to assure that all work and products delivered or incorporated into the PROJECT by AUTHORITY conform with then existing STATE standards. IQA does not include any PROJECT related work deemed necessary to actually develop and deliver the PROJECT, nor does it involve any validation to verify and recheck any work performed by AUTHORITY and/or its consultants or contractors and no liability will be assignable to STATE, its officers and employees by AUTHORITY under the terms of this Agreement or by third parties by reason of STATE's IQA activities.
3. The Project Study Report (PSR) for PROJECT, approved on December 19, 2007, is by this reference, made an express part of this Agreement.
4. The basic design features shall comply with those addressed in the approved PSR, unless modified as required for completion of the PROJECT's environmental documentation and/or if applicable, required by the Federal Highway Administration (FHWA) or STATE.
5. The design, right of way acquisition, preparation of environmental documentation, including investigative studies and technical environmental reports, for PROJECT shall be performed in accordance with all applicable Federal and STATE standards and practices current as of the date of performance. Any exceptions to applicable design standards shall first be considered by STATE for approval via the processes outlined in STATE's Highway Design Manual and appropriate memoranda and design bulletins published by STATE. In the event that STATE proposes and/or requires a change in design standards, implementation of new or revised design standards shall be done as part of the work on PROJECT in accordance with STATE's current Highway Design Manual Section 82.5, "Effective Date for Implementing Revisions to Design Standards." STATE shall consult with AUTHORITY in a timely manner regarding the effect of proposed and/or required changes on PROJECT.
6. AUTHORITY will be the CEQA Lead Agency and STATE will be a CEQA Responsible Agency. STATE will be the NEPA Lead Agency, if applicable. AUTHORITY will assess PROJECT impacts on the environment and AUTHORITY will prepare the appropriate level of environmental documentation and necessary associated supporting investigative studies and technical environmental reports in order to meet the requirements of CEQA and if applicable, NEPA. AUTHORITY will submit to STATE all investigative studies and technical environmental reports for STATE's review, comment, and concurrence as the CEQA Responsible Agency and if applicable, STATE's review, comment and approval as the NEPA Lead Agency. The environmental document and/or categorical exemption/exclusion determination, including the

administrative draft, draft, administrative final, and final environmental documentation, as applicable, will require STATE's review, comment, and concurrence as the CEQA Responsible Agency and if applicable, STATE's review, comment, and approval as the NEPA Lead Agency, prior to public availability.

If, during preparation of preliminary engineering studies, preparation of the PS&E, performance of right of way activities, or performance of PROJECT construction, new information is obtained which requires the preparation of additional environmental documentation to comply with CEQA and if applicable, NEPA, this Agreement will be amended to include completion of those additional tasks by AUTHORITY.

7. AUTHORITY shall be fully responsible for complying with and implementing any and all environmental commitments set forth in the environmental documentation, permits, agreements, and/or approvals for PROJECT. The costs of said compliance and implementation shall be a PROJECT cost.
8. AUTHORITY, as a PROJECT cost, shall be responsible for preparing, submitting, publicizing and circulating all public notices related to the CEQA environmental process, including, but not limited to, notice(s) of availability of the environmental document and/or determinations and notices of public meetings/hearings. AUTHORITY, as a PROJECT cost, and to the STATE's satisfaction, shall be responsible for preparing, submitting, publicizing and circulating all public notices related to the NEPA environmental process if applicable, including, but not limited to, notice(s) of availability of the environmental document and/or determinations and notices of public meetings/hearings. Public notices shall comply with all State and Federal laws, regulations, policies and procedures. STATE will work with the appropriate Federal agency to publish notices in the Federal Register, if applicable.

AUTHORITY, as a PROJECT cost, shall be responsible for planning, scheduling and holding of all public meetings/hearings related to the CEQA environmental process and if applicable, the NEPA environmental process, including, but not limited to, public meetings/hearings on the environmental document. If PROJECT is also subject to NEPA compliance, AUTHORITY shall coordinate the planning, scheduling, and holding of public meetings/hearings on the environmental document with STATE. AUTHORITY shall provide STATE the opportunity to provide comments on any public meeting/hearing exhibits, handouts or other materials at least ten (10) days prior to any such public meetings/hearings. AUTHORITY and if applicable, STATE, as the NEPA Lead Agency, maintains final editorial control of exhibits, handouts or other materials to be used at public meetings/hearings.

9. In the event AUTHORITY would like to hold separate and/or additional public meetings/hearings regarding the PROJECT, AUTHORITY must clarify in any meeting/hearing notices, exhibits, handouts or other materials that AUTHORITY is the CEQA Lead Agency and that STATE is the CEQA Responsible Agency and if applicable, the NEPA Lead Agency. Such notices, handouts and other materials shall also specify that public comments gathered at such meetings/hearings are not part of the CEQA and if applicable, NEPA, public review process. AUTHORITY shall provide STATE the opportunity to provide comments on any meeting/hearing exhibits, handouts or other materials at least ten (10) days prior to any such meetings/hearings. STATE maintains final editorial control of exhibits, handouts or other materials to be used at public meetings/hearings solely with respect to text or graphics that could lead to public confusion over NEPA related roles and responsibilities.
10. AUTHORITY agrees to obtain, as a PROJECT cost, all necessary PROJECT permits, agreements, and/or approvals from appropriate regulatory agencies, unless the parties

agree otherwise in writing. If STATE agrees in writing to obtain said PROJECT permits, agreements, and/or approvals, those said costs shall be a PROJECT cost.

11. AUTHORITY shall be fully responsible for complying with and implementing any and all environmental commitments set forth in the environmental documentation, permit(s), agreement(s) and/or approvals for PROJECT. The costs of said compliance and implementation shall be a PROJECT cost. If there is a legal challenge to the environmental documentation, including investigative studies and/or technical environmental report(s), permit(s), agreement(s), and/or approvals for PROJECT, all legal costs associated with those said legal challenges shall be a PROJECT cost.
12. AUTHORITY shall allow for detailed involvement by STATE and allow STATE the opportunity to review and approve specific milestones in the CEQA environmental process.
13. All administrative reports, studies, materials, and documentation, including, but not limited to, all administrative drafts and administrative finals, relied upon, produced, created or utilized for PROJECT will be held in confidence pursuant to Government Code section 6254.5(e). The parties agree that said material will not be distributed, released or shared with any other organization, person or group other than the parties' employees, agents and consultants whose work requires that access without the prior written approval of the party with the authority to authorize said release and except as required or authorized by statute or pursuant to the terms of this Agreement.
14. AUTHORITY's share of all changes in development and construction costs associated with modifications to the basic design features as described above shall be in the same proportion (one hundred percent (100%)) as described in this Agreement, unless mutually agreed to the contrary by STATE and AUTHORITY in a subsequent amendment to this Agreement.
15. The party that discovers Hazardous Material (HM) will immediately notify the other party(ies) to this Agreement.

HM-1 is defined as hazardous material (including but not limited to hazardous waste) that requires removal and disposal pursuant to federal or state law, whether it is disturbed by PROJECT or not.

HM-2 is defined as hazardous material (including but not limited to hazardous waste) that may require removal and disposal pursuant to federal or state law, only if disturbed by PROJECT.

16. STATE, independent of PROJECT, is responsible for any HM-1 found within existing SHS right of way. STATE will undertake HM-1 management activities with minimum impact to PROJECT schedule and will pay all costs for HM-1 management activities.

STATE has no responsibility for management activities or costs associated with HM-1 found outside the existing SHS right of way. AUTHORITY, independent of PROJECT, is responsible for any HM-1 found within PROJECT limits outside existing SHS right of way. AUTHORITY will undertake, or cause to be undertaken, HM-1 management activities with minimum impact to PROJECT schedule, and AUTHORITY will pay, or cause to be paid, all costs associated with HM-1 management activities.

17. If HM-2 is found within the limits of PROJECT, the public agency responsible for advertisement, award, and administration (AAA) of the PROJECT construction contract will be responsible for HM-2 management activities.

Any management activity cost related to HM-2 is a PROJECT construction cost.

18. Management activities associated with either HM-1 or HM-2 include, without limitation, any necessary manifest requirements and designation of disposal facility.
19. STATE's acquisition or acceptance of title to any property on which any hazardous material is found will proceed in accordance with STATE's policy on such acquisition.
20. A separate Cooperative Agreement or agreements will be required to address Landscape Maintenance, and to cover responsibilities and funding for the right of way and construction phase of PROJECT.
21. STATE will prepare a new Freeway Agreement and obtain approval for the new public road connection(s) from the California Transportation Commission, if required. AUTHORITY will prepare all necessary exhibits to complete the revised Freeway Agreement.
22. Upon PROJECT completion and acceptance, subject to the approval of STATE, STATE will operate and maintain all PROJECT facilities at AUTHORITY's cost until a Maintenance Agreement is executed or an existing agreement, if any, is amended to incorporate the maintenance of these new PROJECT facilities located on the SHS.
23. Nothing within the provisions of this Agreement is intended to create duties or obligations to or rights in third parties not parties to this Agreement or to affect the legal liability of either party to the Agreement by imposing any standard of care with respect to the development, design, construction, operation, or maintenance of the SHS and public facilities different from the standard of care imposed by law.
24. Neither STATE nor any officer or employee thereof is responsible for any injury, damage, or liability occurring by reason of anything done or omitted to be done by AUTHORITY under or in connection with any work, authority, or jurisdiction conferred upon AUTHORITY under this Agreement. It is understood and agreed that, AUTHORITY shall fully defend, indemnify, and save harmless STATE and all its officers and employees from all claims, suits or actions of every name, kind and description brought forth under, including, but not limited to, tortious, contractual, inverse condemnation, and other theories or assertions of liability occurring by reason of anything done or omitted to be done by AUTHORITY under this agreement.
25. Neither AUTHORITY nor any officer or employee thereof is responsible for any injury, damage, or liability occurring by reason of anything done or omitted to be done by STATE, under or in connection with any work, authority, or jurisdiction conferred upon STATE under this Agreement. It is understood and agreed that STATE shall fully defend, indemnify, and save harmless AUTHORITY and all its officers and employees from all claims, suits or actions of every name, kind and description brought forth under, including, but not limited to, tortious, contractual, inverse condemnation, and other theories or assertions of liability occurring by reason of anything done or omitted to be done by STATE under this Agreement.
26. Prior to the commencement of any work pursuant to this Agreement, either STATE or AUTHORITY may terminate this Agreement by written notice to the other party. No alteration or variation of the terms of this Agreement shall be valid unless made by a formal amendment executed by the parties hereto and no oral understanding or agreement not incorporated herein shall be binding on any of the parties hereto.

27. This Agreement shall terminate if PROJECT PS&E is not completed by June 30, 2012.
28. This Agreement shall terminate upon the satisfactory completion of all post-PROJECT construction obligations of AUTHORITY and the delivery of required PROJECT construction documents, with concurrence of STATE, or on 6/30/2017, whichever is earlier in time, except that the ownership, operation, maintenance, indemnification, environmental commitments, legal challenges, and claims articles shall remain in effect until terminated or modified, in writing, by mutual agreement. Should any construction related or other claims arising out of PROJECT be asserted against one of the parties, the parties agree to extend the fixed termination date of this Agreement, until such time as the construction related or other claims are settled, dismissed or paid.
29. Except as otherwise specifically provided in this Agreement, wherever in this Agreement STATE or AUTHORITY is required or requested to give its consent or approval to any matter or action by the other, such consent or approval shall not be unreasonably withheld or delayed and the reasons for disapproval of consent shall be stated in reasonable detail in writing.

STATE OF CALIFORNIA
Department of Transportation

SAN FRANCISCO COUNTY
TRANSPORTATION AUTHORITY

RANDELL H. IWASAKI
Director

By: _____
Deputy District Director

By: _____
JOSÉ LUIS MOSCOVICH
Executive Director

Approved as to form and procedure:

Attest: _____
AUTHORITY Clerk

By: _____
Attorney
Department of Transportation

Recommended for approval:

Certified as to funds:

By: _____
LEE SAAGE
Deputy Director Capital Projects

By: _____
District Budget Manager

Approved as to form:

Certified as to financial terms and
policies:

By: _____
Legal Counsel
San Francisco County Transportation
Authority

By: _____
Accounting Administrator

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** October 8, 2009

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 3a
Consent Calendar
Item- TBPOC September 2, 2009 Meeting Minutes

Recommendation:
APPROVAL

Cost:
N/A

Schedule Impacts:
N/A

Discussion:
The Program Management Team has reviewed and requests TBPOC approval of the September 2, 2009 Meeting Minutes.

Attachment(s):
September 2, 2009 Meeting Minutes



TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

MEETING MINUTES

September 2, 2009, 10:00 AM – 1:00 PM

Mission Bay Office, Conference Room 1906, 325 Burma Road, Pier 7, Oakland

Attendees: TBPOC Members: Steve Heminger, Randy Iwasaki, and Bimla Rhinehart
PMT Members: Tony Anziano, Andy Fremier, and Stephen Maller
Participants: Mike Forner, Michele DiFrancia, Ted Hall, Beatriz Lacson, Rick Land, Peter Lee, Brian Maroney, Bart Ney, Dina Noel, Bijan Sartipi, Ken Terpstra, and Jason Weinstein
Part-Time Participants: Bill Casey, Raj Oberoi, Patrick Treacy, Deanna Vilcheck, Dan Baker (C. C. Myers), Bob Coupe (C. C. Myers), Dan Himick (C. C. Myers), and Bill Halsband (Mammoet)

Convened: 10:04 AM

Items		Action
1.	CHAIR' REPORT <ul style="list-style-type: none">Steve Heminger, the Chair, expressed his thanks to the staff for all the effort expended in arranging the TBPOC trips to Canada and China.	
2.	LABOR DAY WEEKEND BRIDGE CLOSURE <ul style="list-style-type: none">a. East Tie-In (ETI) Presentation by C.C. Myers, Mammoet, DCCI<ul style="list-style-type: none">Using the wall maps, Bill Casey kicked off the presentation by providing an overview of the site, access information and instructions on how to get from one area to another.Bob Coupe, CCM Project Manager, walked the TBPOC through the "Roll-Out Weekend Work Summary, Plan Schedule," which summarized the schedule of activities for the Labor Day weekend full bridge closure.The first 16 hours of the work are the most critical as they	

(continued)

Items	Action
<p>encompass the most unknowns.</p> <ul style="list-style-type: none">➤ As much uncertainty as possible has been removed.➤ There are contingencies for every aspect of the work. Everything has a back-up plan. <ul style="list-style-type: none">○ The weather is forecast to be calm, with winds under 30 mph.○ Within three hours of start, there is no turning back – at which point the project team is committed to the bridge closure and completing the job.○ Demolition of the old structure will start on Tuesday, September 8 and continue until spring of 2010. <ul style="list-style-type: none">• Bill Halsband of Mammoet gave a presentation of the company background and extensive experience in the hoisting and transporting of heavy objects.○ For the West Tie-In work in 2007, Mammoet had a 14-hour window to get the job done but completed it in less than three hours. They anticipate this move will go just as well. <p>b. Presentation by Public Information Office</p> <ul style="list-style-type: none">• Bart Ney gave an update on the communications plan for the Labor Day weekend closure of the Bay Bridge, which included an overview of media and visitor access to Yerba Buena Island/Treasure Island and a summary of media and documentation activity. <ul style="list-style-type: none">• TBPOC conference calls to check on the progress/status of the weekend activities are scheduled for 3:30 PM	

(continued)

Items	Action
on September 4, 5, 6 and 7 (if necessary).	
3. CONSENT CALENDAR <ul style="list-style-type: none">a. TBPOC August 7 , 2009 TBPOC Meeting Minutesb. 2010 TBPOC Meeting Calendarc. Yerba Buena Island Detour Contract Change Orders (CCO's)<ul style="list-style-type: none">1) CCO 177 –Demolition of Span YB4 steel truss after the span has been rolled out, for an amount not to exceed \$12,540,000. <ul style="list-style-type: none">• Mike Forner reported that CCO 177 actual cost came in at \$1.29 million less than the not-to-exceed amount.	<ul style="list-style-type: none">• The TBPOC APPROVED all consent calendar items, as presented.
4. PROGRESS REPORTS <ul style="list-style-type: none">a. Draft August 2009 Monthly Progress Report<ul style="list-style-type: none">• Andy Fremier presented, for TBPOC approval, the Draft August 2009 Monthly Progress Report. The final version will be issued early next week.	<ul style="list-style-type: none">• The TBPOC APPROVED the August 2009 Monthly Progress Report.
5. SAN FRANCISCO-OAKLAND BAY BRIDGE (SFOBB) UPDATES <ul style="list-style-type: none">a. Self-Anchored Suspension Superstructure<ul style="list-style-type: none">1) TBPOC China & Canada Visit Debrief <ul style="list-style-type: none">• Tony Anziano distributed two draft letters from the TBPOC to ABF and its subcontractors, Candraft and ZPMC, one covering the key points agreed upon at the meeting in Vancouver, Canada, and another covering the key points of discussion and agreement reached at the meeting in	<ul style="list-style-type: none">• The PMT and TBPOC to review the draft letters by Thursday, September 3, for signature by the TBPOC and transmittal to ABF on Friday, September 4.

(continued)

Items		Action
<p>Shanghai, China.</p> <ul style="list-style-type: none">• In regards to the press release covering the TBPOC China and Canada visits, Randy Iwasaki proposed that it be sent out after the Labor Day weekend activities.○ The Chair suggested that refinement of the press statement continue, and release be scheduled for next week after the appropriate reviews. <p>b. Yerba Buena Island Transition Structures No. 1</p> <p>1) Update</p> <ul style="list-style-type: none">• Not discussed. <p>c. Oakland Touchdown No. 1</p> <p>1) Update</p> <ul style="list-style-type: none">• Not discussed.		
6	OTHER BUSINESS <ul style="list-style-type: none">• The Chair requested the addition of an item to the TBPOC agenda – a meeting between the TBPOC and PMT - to be included regularly.• The Chair announced that he will be unavailable for an October 1st TBPOC meeting and requested a re-scheduling.<ul style="list-style-type: none">○ The TBPOC agreed to re-schedule the meeting to the morning of Friday, October 16.	<ul style="list-style-type: none">• Staff to add “TBPOC/PMT Meeting” to the TBPOC agenda, as a standing item.• Re-schedule the next TBPOC meeting for Friday, October 16, 2009, 9:00AM to 12:00PM.
7	TOUR OF YERBA BUENA ISLAND (OPTIONAL) <ul style="list-style-type: none">• N/A	

Adjourned: 11:11 PM

(continued)

MEETING MINUTES

September 2, 2009, 10:00 AM – 1:00 PM

Mission Bay Office, Conference Room 1906, 325 Burma Road, Pier 7, Oakland

APPROVED BY:

STEVE HEMINGER, Executive Director
Bay Area Toll Authority

Date

RANDELL H. IWASAKI, Director
California Department of Transportation

Date

BIMLA G. RHINEHART, Executive Director
California Transportation Commission

Date

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** October 8, 2009

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 3b
Consent Calendar
Item- TBPOC September 18, 2009 Conference Call Minutes

Recommendation:
APPROVAL

Cost:
N/A

Schedule Impacts:
N/A

Discussion:
The Program Management Team has reviewed and requests TBPOC approval of the September 18, 2009 Conference Call Minutes.

Attachment(s):
September 18, 2009 Conference Call Minutes



TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

CONFERENCE CALL MINUTES

September 18, 2009, 4:00 PM – 5:00 PM

Attendees: TBPOC Members: Steve Heminger, Randy Iwasaki, and Bimla Rhinehart
PMT Members: Tony Anziano, Andy Fremier, and Stephen Maller
Participants: Michele DiFrancia, Beatriz Lacson, Rick Land, Peter Lee, Brian Maroney, Rod McMillan, Dina Noel, Bijan Sartipi, Jon Tapping, Chris Traina, Pat Treacy, and Jason Weinstein

Convened: 4:04 PM

Items		Action
1. DUMBARTON / ANTIOCH BRIDGES		
a. Cost Update		
• Mo Pazooki and Jason Weinstein provided an update on the environmental permits, cost estimates, schedule, legislation status and design team progress on each bridge project, since status was last reported to the TBPOC in July 2009.		
○ AB 1175, which provides for the addition of seismic safety improvement projects on the Dumbarton and Antioch Bridges to the TBSRP, is awaiting action by the Governor. The bill will become law effective January 1, 2010, if signed by the Governor or, no action is taken by October 11, 2009.		
○ With environmental permitting on track, it appears the baseline project delivery schedule milestone dates can be met.		
○ The combined cost estimate has decreased due to a reduction in project scopes and risks.		
○ An update will be provided to the BATA Oversight Committee on October 14, 2009.		

(continued)

Items	Action
<ul style="list-style-type: none">• Jason Weinstein requested TBPOC approval of the funding target value of \$700M to \$750M to complete the seismic retrofit of both the Dumbarton and Antioch Bridges.<ul style="list-style-type: none">○ The PMT recommended \$750M to be an appropriate estimate to cover all current risk associated with each project.○ Upon discussion, the TBPOC agreed with the PMT recommendation to increase the risk allowance by \$50M, for a total cost estimate of \$750M.• Steve Heminger, the Chair, announced that discussion on raising tolls will be initiated at the BATA Oversight Commission October 14 meeting, to cover (1) the inclusion of the Dumbarton and Antioch Bridge seismic retrofit projects in the TBSRP, (2) higher debt cost, and (3) decrease in traffic volume.<ul style="list-style-type: none">○ It is anticipated that the following options will be presented: a \$1.00 increase for all toll bridges, from \$4.00 to \$5.00; for the first time a carpool charge; and, an option for congestion pricing for the SFOBB only of \$6.00 during peak hours and \$4.00 during off-peak hours.	<ul style="list-style-type: none">• The TBPOC (CTC abstained) APPROVED a funding target value of \$750M to complete both the Dumbarton and Antioch Bridge seismic retrofit projects, as discussed.
<p>2. YERBA BUENA ISLAND DETOUR</p> <ul style="list-style-type: none">a. Contract Change Order 217 (Skid Bent Demolition and Backfill)• Dina Noel presented CCO 217 in the not-to-exceed amount of \$4,500,000 for the demolition and removal of the East Tie-In (ETI) skid bent system used during the recent ETI roll-out/ roll-in.	<ul style="list-style-type: none">• The TBPOC APPROVED CCO 217, as presented.

(continued)

Items	Action
<ul style="list-style-type: none">• Jon Tapping noted that due to the successful completion of the ETI \$6M in risks are being retired.• The Chair requested a briefing on the Risk Register at the next TBPOC meeting.	<ul style="list-style-type: none">• Jon Tapping to give a presentation to the TBPOC on the Risk Register and how it works.
<p>3. SELF-ANCHORED SUSPENSION SUPERSTRUCTURE</p> <ul style="list-style-type: none">a. TBPOC China/Canada Visit Update• The Chair enumerated three items for discussion: (1) the two letters sent to ABF covering the meetings with Candraft and ZPMC; (2) the ABF memo expressing concern over the items covered at the recent BATA Oversight Committee meeting and the media coverage of them; 3) preparation for the October TBPOC meeting with ABF to discuss and agree upon an amount of money required to resolve outstanding issues.○ Regarding Item #1, Tony Anziano reported that ABF has not responded to the two letters. He will follow up.<ul style="list-style-type: none">➤ Mike Flowers provided the latest revised 1st shipment date of October 20, 2009, indicating that an earlier shipment date is not possible.➤ Tony Anziano will be in China this coming week and will get an onsite assessment and apprise the TBPOC accordingly.○ Regarding Item #2, the Chair pointed out that the TBPOC consists of members who all work for public agencies and boards, and we cannot control what the media reports from public meetings.<ul style="list-style-type: none">➤ While ABF and Candraft have taken offense to the media portrayal of the information	<ul style="list-style-type: none">• Tony Anziano to follow up with ABF regarding items outlined in recent TBPOC letters to them.

(continued)

Items	Action
<p>reported at the BATA Oversight Committee meeting, it was noted that the report was factual.</p> <ul style="list-style-type: none">➤ It was the consensus that it is important to maintain transparency, to be forthcoming, and to ensure that any pertinent information being released to the media/public is well thought out.➤ The Chair indicated that he will call Bob Luffy, (with Randy Iwasaki to join him) to: (1) thank him for what ABF did over the Labor Day weekend, (2) clarify media treatment of the TBPOC meetings in Canada and China, and (3) ascertain ABF's position on how to resolve the issues spelled out in the two TBPOC letters covering the Vancouver and China meetings.○ Regarding Item #3, staff is developing a package for the PMT that will serve as the basis for TBPOC discussion with ABF in October.➤ There is an ABF meeting that conflicts with the TBPOC October 16 meeting.➤ Staff should identify an alternate meeting date that works for both the TBPOC and ABF; however, the TBPOC will still meet on October 16 and participate in the ETI recognition luncheon.	<ul style="list-style-type: none">• Randy Iwasaki to coordinate with Mark DeSio for an overall media strategy on this issue, and involve Bart Ney as needed.• Steve Heminger and Randy Iwasaki to call Bob Luffy to thank ABF for their support during Labor Day weekend; to follow up on the TBPOC letters to ABF; and, to discuss resolution of outstanding items.• The PMT to set an alternate meeting date close to October 16, and develop a strategy for the meeting with ABF. The October 16 meeting will serve as a preparatory meeting, should the TBPOC/ ABF meeting be scheduled after October 16. Otherwise a TBPOC conference call may be warranted.
<p>4 OTHER BUSINESS</p> <ul style="list-style-type: none">• Randy Iwasaki thanked staff for the well-orchestrated Labor Day weekend preparations and events.○ The Chair stated it was a shining	<ul style="list-style-type: none">• The Department and BATA to

(continued)

Items	Action
<p>moment for the Department, and suggested giving awards, financial (Department rewards program) and otherwise (BATA resolutions) to key players, in appreciation for a job well-done.</p> <ul style="list-style-type: none"> • Randy Iwasaki reported that the Department will continue regular bridge inspections, as a follow up to the eye bar failure. Starting Saturday night through Sunday morning, two right lanes of the east span of the SFOBB will be closed for the maintenance check. ○ Bijan Sartipi is doing an interview on the maintenance check, and a press release is also scheduled. ○ The Chair invited Bijan Sartipi to present on ongoing bridge inspections and maintenance at the next BATA Oversight Committee meeting. He indicated that Bart Ney should also attend. ○ Brian Maroney reported that the bridge looks fine and stable. <ul style="list-style-type: none"> ➤ Particular attention is being given to the eye bar next to the one that broke. ➤ The maintenance situation will be evaluated and an updated set of recommendations will be provided to the PMT and TBPOC in a month. ○ The Chair requested that this item be included on the upcoming TBPOC meeting agendas. 	<p>arrange for recognition awards to deserving people at the October 16 recognition luncheon.</p> <ul style="list-style-type: none"> • Include the SFOBB inspection and maintenance item on upcoming TBPOC meeting agendas.

Adjourned: 4:55 PM

(continued)

CONFERENCE CALL MINUTES
September 18, 2009, 4:00 PM –5:00 PM

APPROVED BY:

STEVE HEMINGER, Executive Director
Bay Area Toll Authority

Date

RANDELL H. IWASAKI, Director
California Department of Transportation

Date

BIMLA G. RHINEHART, Executive Director
California Transportation Commission

Date

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** October 8, 2009

FR: Dina Noel, Assistant Deputy Director, Toll Bridge Program, CTC

RE: Agenda No. - 3c1,2,3,4
Item- Consent Calendar
Contract Change Orders - Yerba Buena Island Detour

Recommendation:
APPROVAL

Total Cost: \$15,102,460.00

East Tie-In –

CCO 93-S2	\$ 300,000.00
CCO 149-S1	\$ 400,000.00
CCO 177	\$ 11,249,560.00
CCO 217	\$ 3,152,900.00

Schedule Impacts:

No additional impacts to current December 2010 contract completion date.

Discussion:

East Tie-In –

CCO 93-S2 in the amount of \$300,000 – The original change order, along with Supplement No. 1, provided for the lead abatement of the existing bridge required for the roll out of the Span YB4 truss. It has been determined that the duration required for the platforms to be in place exceeds the original estimate. The additional \$300,000 will provide for the extended rental costs of the access platforms and subsequent platform modifications made to accommodate adjacent work.

CCO 149-S1 in the amount of \$400,000 - The original change order provided for the fabrication of the 6 permanent East Tie-In bearings. The additional \$400,000 will pay for subsequent design bearing modifications, and will cover for original underestimated costs for fabrication, prototype testing, and field inspections.

Memorandum

CCO 177 in the amount of \$11,249,560 provides for the lowering and bridge removal of the existing Span YB4 truss that was rolled out during Labor Day Weekend of 2009. This change order was approved at the September 2, 2009 TBPOC meeting at a cost not to exceed \$12,540,000.

CCO 217 in the amount of \$3,152,900 provides for the bridge removal of the East Tie-In skid bent system and the demolition of numerous concrete footings associated with the skid bent system and the Span YB4 lowering system. This change order was approved at the September 18, 2009 TBPOC conference call at a cost not to exceed \$4,500,000.

Attachment(s):

1. Draft CCOs and Memoranda: 93-S2, 149-S1
2. Final CCOs and Memoranda: 177, 217
3. YBI Detour CCO Implementation Strategy, as of October 6, 2009

CONTRACT CHANGE ORDER MEMORANDUM

DATE: 8/18/2009 Page 1 of 1

TO: MIKE FORNER / DEANNA VILCHECK			FILE: E.A. 04 - 0120R4	
FROM: BILL CASEY			CO-RTE-PM SF-80-12.6/13.2	
FED. NO.				
CCO#: 93	SUPPLEMENT#: 2	Category Code: CHSX	CONTINGENCY BALANCE (incl. this change) \$55,775,400.59	
COST: \$300,000.00		INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>	HEADQUARTERS APPROVAL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
SUPPLEMENTAL FUNDS PROVIDED: \$0.00		IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
CCO DESCRIPTION: Scaffold Access Additional Funds		PROJECT DESCRIPTION: CONSTRUCT ROUTE 80 TEMP BYPASS STRUCTURE		
Original Contract Time: 475 Day(s)	Time Adj. This Change: 0 Day(s)	Previously Approved CCO Time Adjustments: 0 Day(s)	Percentage Time Adjusted: (including this change) 0 %	Total # of Unreconciled Deferred Time CCO(s): (including this change) 0

THIS CHANGE ORDER PROVIDES FOR:

additional funds for the rental of the East Ti-In access platform.

The original Change Order No. 93 along with Supplement No. 1 provided for the construction of a temporary access platform and the ensuing lead abatement of the existing YB4 steel truss. The installation and removal of the platform along with the actual lead abatement work was compensated by an agreed lump sum. The rental of the platform, which also provides access for the engineer to the existing truss, is compensated at force account.

It is now anticipated that the existing funding provided for the platform rental is inadequate, as the duration that the platform is required to be in place shall exceed the original estimate. In addition to this, the platform has to be adjusted in order to allow for concurrent work to be performed in the area.

The work shall be performed as extra work at force account at an estimated cost of \$300,000 and shall be financed from the contract's contingency funds. A cost analysis is on file.

No adjustment of contract time is warranted, as the work will not affect the controlling operation.

Maintenance concurrence is not required, as this change order will not affect any permanent roadway features.

CONCURRED BY:		ESTIMATE OF COST	
Construction Engineer:	Date	THIS REQUEST	TOTAL TO DATE
Bridge Engineer:	Date	ITEMS	\$0.00
Project Engineer: Hong Wong, PE	Date	FORCE ACCOUNT	\$300,000.00
Project Manager: Alec Melkonians	Date 8/18/09	AGREED PRICE	\$0.00
FHWA Rep.:	Date	ADJUSTMENT	\$0.00
Environmental:	Date	TOTAL	\$300,000.00
Other (specify):	Date	FEDERAL PARTICIPATION	
Other (specify):	Date	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING	
District Prior Approval By:	Date	FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type)	
HQ (Issue Approve) By:	Date	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS	
Resident Engineer's Signature:	Date	FEDERAL FUNDING SOURCE	PERCENT

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 93	Suppl. No. 2	Contract No. 04 - 0120R4	Road SF-80-12.6/13.2	FED. AID LOC.:
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To: CC MYERS INC

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Extra Work at Force Account:

Provide additional funds for the rental of the scaffold platforms as specified under the original Change Order No. 93 and provide for the adjustment of the platforms in order to allow for concurrent work as determined by the Engineer.

Estimated cost of Extra Work at Force Account\$300,000.00

Estimated Cost: Increase ☒ Decrease ☐ \$300,000.00

By reason of this order the time of completion will be adjusted as follows: 0 days

Submitted by

Signature	Resident Engineer BILL CASEY	Date
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Approval Recommended by

Signature	Area Construction Manager MIKE FORNER	Date
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Engineer Approval by

Signature	Area Construction Manager MIKE FORNER	Date
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We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature	(Print name and title)	Date
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CONTRACT CHANGE ORDER MEMORANDUM

TO: MIKE FORNER / DEANNA VILCHECK			FILE: E.A. 04 - 0120R4	
FROM: BILL CASEY			CO-RTE-PM SF-80-12.6/13.2	
FED. NO.				
CCO#: 149	SUPPLEMENT#: 1	Category Code: CHPA	CONTINGENCY BALANCE (incl. this change) \$48,029,593.59	
COST: \$400,000.00		INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>	HEADQUARTERS APPROVAL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
SUPPLEMENTAL FUNDS PROVIDED: \$0.00		IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
CCO DESCRIPTION: Revised ETI Bearing Detail Plan Sheets			PROJECT DESCRIPTION: CONSTRUCT ROUTE 80 TEMP BYPASS STRUCTURE	
Original Contract Time: 475 Day(s)	Time Adj. This Change: 0 Day(s)	Previously Approved CCO Time Adjustments: 1195 Day(s)	Percentage Time Adjusted: (including this change) 252 %	Total # of Unreconciled Deferred Time CCO(s): (including this change) 7

THIS CHANGE ORDER PROVIDES FOR:

Minor design revisions to the bearing details of the East Tie-In (ETI) structure.

This contract provides for the construction of a temporary detour for both eastbound and westbound I-80 traffic that allows for the tie in of the east span of the new San Francisco Oakland Bay Bridge (SFOBB) to Yerba Buena Island. The detour will allow for the construction of the permanent structure, the Yerba Buena Island Transition Structure, which connects the signature SAS structure to Yerba Buena Island.

The detour consist of three main structures, the East Tie-In (ETI) to the bridge, the West Tie-In to the island and the viaduct structure between the two tie ins. The contract was awarded as a performance based project with the contractor responsible for meeting the design criteria specified in the contract.

A December 14, 2006 Department strategy memorandum, approved by Tony Anziano, Toll Bridge Program Manager, and Richard Land, Chief Engineer, recommended that the Department assume the design responsibility for the East Tie-In (ETI) structure. Based on this memorandum, the design of the structure was changed from a design that incorporated the existing steel truss bridge with the new structure to a design that replaces the existing structure with a new structure (roll out / roll in).

The original Change Order No. 149 provided the plans and specifications necessary for the fabrication of the 6 permanent bearings for the ETI structure and provided compensation for the fabrication of a prototype bearing to be used in testing. That change order provided for the work to be performed as extra work at force account. This change order incorporates minor changes to the originally issued plan sheets for the bearing details as issued by Toll Bridge Design.

It is anticipated that the current force account funding shall be inadequate to compensate the contractor for the additional costs resulting from these design revisions and for the work specified under the original change order. The cost of the fabrication of the bearings, the prototype testing and the field inspection of the condition of the existing pier that will support 4 of the 6 permanent bearings is expected to exceed the original cost estimate.

The work shall be compensated as extra work at force account at an estimated cost of \$400,000.00 which shall be financed from the contract contingency funds. A cost analysis is on file.

No adjustment of contract time is warranted as the change will not affect the controlling operation.

This change was concurred with by Alec Melkonians - Project Manager, Hong Wong - Project Engineer, and Lina Ellis - Structure Maintenance.

CONCURRED BY:			ESTIMATE OF COST		
Construction Engineer:	Bill Casey, Resident Engineer	Date	THIS REQUEST		TOTAL TO DATE
Bridge Engineer:		Date	ITEMS	\$0.00	\$0.00
Project Engineer:	Hong Wong, PE	Date	FORCE ACCOUNT	\$400,000.00	\$2,000,000.00
Project Manager:	Alec Melkonians	Date	AGREED PRICE	\$0.00	\$0.00
FHWA Rep.:		Date	ADJUSTMENT	\$0.00	\$0.00
Environmental:		Date	TOTAL	\$400,000.00	\$2,000,000.00
Other (specify):	Lina Ellis, Maintenance	Date	FEDERAL PARTICIPATION		
Other (specify):		Date	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE		
District Prior Approval By:		Date	<input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING		
HQ (Issue Approve) By:	Bob Molera, HQ CCO Engineer	Date	FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type)		
Resident Engineer's Signature:		Date	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS		
			FEDERAL FUNDING SOURCE PERCENT		

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO 149	Suppl. No. 1	Contract No. 04 - 0120R4	Road SF-80-12.6/13.2	FED. AID LOC.:
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To: CC MYERS INC

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Incorporate the changes to the bearing details of the East Tie-In portion of the Temporary Bypass Structure (Bridge No. 34-0006 (TEMP)) as shown in the revised plan sheets of Sheet No. 2 of this change order.

All revisions to the bearing details shown on Sheet No. 2 of this change order shall supersede the original plan sheet issued under the original Change Order No. 149.

Extra Work at Force Account:

Provide compensation for additional costs incurred resulting from the revisions to the East Tie-In Bearings incorporated under this change order and provide additional funding for the work specified as extra work at force account under the original Change Order No. 149.

Estimated Cost of Extra Work at Force Account\$400,000.00

Estimated Cost: Increase ☒ Decrease ☐ \$400,000.00

By reason of this order the time of completion will be adjusted as follows: 0 days

Submitted by		
Signature	Resident Engineer BILL CASEY	Date

Approval Recommended by		
Signature	Area Construction Manager DEANNA VILCHECK	Date

Engineer Approval by		
Signature	Area Construction Manager DEANNA VILCHECK	Date

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by		
Signature	(Print name and title)	Date

CONTRACT CHANGE ORDER MEMORANDUM

DATE: 2/17/2009 Page 1 of 2

TO: MIKE FORNER / DEANNA VILCHECK		FILE: E.A. 04 - 0120R4	
FROM: BILL CASEY		CO-RTE-PM SF-80-12.6/13.2	
		FED. NO. ACBRIM-080-1(097)N	
CCO#: 177	SUPPLEMENT#: 0	Category Code: CHPA	CONTINGENCY BALANCE (incl. this change) \$56,474,154.59
COST: \$11,249,560.00		INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>	HEADQUARTERS APPROVAL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
SUPPLEMENTAL FUNDS PROVIDED: \$0.00		IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
CCO DESCRIPTION: Span YB4 Lowering & Demolition		PROJECT DESCRIPTION: CONSTRUCT ROUTE 80 TEMP BYPASS STRUCTURE	
Original Contract Time: 475 Day(s)	Time Adj. This Change: DEF Day(s)	Previously Approved CCO Time Adjustments: 1195 Day(s)	Percentage Time Adjusted: (including this change) 252 %
			Total # of Unreconciled Deferred Time CCO(s): (including this change) 7

THIS CHANGE ORDER PROVIDES FOR:

The demolition and disposal of the Span YB4 steel truss.

This project, the Yerba Buena Island Detour (YBID), calls for the construction of a temporary detour for both eastbound and westbound I-80 traffic that will allow for the tie in of the new east span of the San Francisco Oakland Bay Bridge to Yerba Buena Island. The YBID encompasses three main structures, the East Tie-In to the existing bridge, the West Tie-In (WTI) to Yerba Buena Island, and the Viaduct structure between the two tie ins.

The original contract was awarded as a performance based contract with the Contractor responsible for the design of the structures based upon meeting specified design criteria. The Department issued a December 14, 2006 memo entitled Strategy for South-South Detour Contract Completion which was approved by Tony Anziano (Toll Bridge Program Manager), Richard Land (Chief Engineer) and subsequently by the TBPOC. This memo recommended that the design of the ETI structure be assumed by the Department as opposed to the as-bid performance based contractor design.

The new design of the ETI structure provides for a roll-out / roll-in concept with a new double deck steel truss span being erected adjacent to the existing span and then rolled into place after the existing span is rolled out. This change order provides for the demolition and disposal of the existing steel truss span (Span YB4) that is rolled out.

Span YB4 is a double deck steel truss roughly 80 meters long and 25 meters wide. It sits approximately 50 meters in the air and is comprised of approximately 1,400 metric tons of steel and 950 cubic meters of concrete. The condition of the truss after it has been lifted and rolled out along with the potential delays associated with demolishing this compromised structure in the air has prompted the method of lowering the span prior to demolition that is being enacted under this change order. Headquarters Construction has performed a risk management analysis of this work and concurs with this change.

The work encompassed under this change includes constructing a temporary gantry system that will support and lower the rolled out span to the ground, relocating two 150 foot high skid bent towers that are located under the roll out span so that they do not obstruct the lowering of the span, constructing falsework for the lowered span to sit on and performing the actual demolition and disposal of the steel truss.

The change order also deletes the original contract item pertaining to the removal of the YB4 span. The scope of work bid by the Contractor for this item entailed only a partial removal of the span as the majority of the span was to be incorporated into the new detour structure. This method was originally accepted by the Department prior to the award of the contract but was abandoned after the December 14, 2006 strategy memo (referenced above) called for the roll out / roll in concept to be implemented.

The deletion of the contract bid item to remove Span YB4 shall result in a \$1,460,000.00 credit to the Department. Compensation for the revised method of lowering and demolition of the span shall be paid as extra work at an agreed lump sum price of \$12,709,560.00. The net change order cost of \$11,249,560.00 shall be financed from the contract's contingency funds. A cost analysis is on file.

Adjustment of contract time is deferred pending completion of the work specified in this change as it may become the controlling operation in accordance with Section 8-1.07 "Liquidated Damages", of the Standard Specifications and Section 10-1.20 "Time Related Overhead (TRO)" of the Special Provisions.

CONTRACT CHANGE ORDER MEMORANDUM

Compensation for delays resulting from this work will be made in accordance with Section 8-1.09 "Right of Way Delays" of the Standard Specifications and Section 10-1.20 "Time Related Overhead" of the Special Provisions.

This change was concurred by Alec Melkonians - Asst. Project Manager, Hong Wong - Project Engineer, and Patrick Treacy - HQ Asst. Construction Coordinator. TBPOC Approval pending.

Maintenance concurrence is not required as the work will not affect and permanent roadway items.

FHWA authorization is no longer required as federal authorization and funding for this project has been officially withdrawn.

CONCURRED BY:			ESTIMATE OF COST		
Construction Engineer:	Bill Casey, Resident Engineer	Date		THIS REQUEST	TOTAL TO DATE
Bridge Engineer:		Date	ITEMS	(\$1,460,000.00)	(\$1,460,000.00)
Project Engineer:	Hong Wong, PE	Date	FORCE ACCOUNT	\$0.00	\$0.00
Project Manager:	Alec Melkonians	Date	AGREED PRICE	\$12,709,560.00	\$12,709,560.00
FHWA Rep.:		Date	ADJUSTMENT	\$0.00	\$0.00
Environmental:		Date	TOTAL	\$11,249,560.00	\$11,249,560.00
Other (specify):	Patrick Treacy, HQ Asst. Const. Co	Date	FEDERAL PARTICIPATION		
Other (specify):		Date	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING		
District Prior Approval By:		Date	FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type)		
HQ (Issue Approve) By:	Bob Molera, HQ CCO Engineer	Date	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS		
Resident Engineer's Signature:		Date	FEDERAL FUNDING SOURCE PERCENT 		

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 177	Suppl. No. 0	Contract No. 04 - 0120R4	Road SF-80-12.6/13.2	FED. AID LOC.: ACBRIM-080-1(097)N
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To: CC MYERS INC

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Eliminate the bridge removal of the existing Route 80 steel truss span YB4 (Bridge No. 33-0025), between Pier YB-4 and Pier E-1, and portions of Pier E-1 as originally contemplated and bid by the Contractor.

Estimate of Decrease in Contract Item at Contract Price:

Item No. 42: BRIDGE REMOVAL (PORTION) LOCATION B
 -1 LS (-100.00%) @.460,000.00 /LS = -\$1,460,000.00 (-100.00%)

In accordance with Section 4-1.03B(3), "Eliminated Items," of the Standard Specifications, the adjustment due to the elimination of Item No. 42 Bridge Removal (Portion), Location B, is zero.

Total Cost for Decrease in Contract Item.....(\$1,460,000.00)

Extra Work at Lump Sum:

Perform all work as specified within this change order pertaining to the demolition of the Span YB4 steel truss of the existing structure (Bridge No. 33-0025) after the span has been rolled out and replaced by the Temporary Bypass Structure (Bridge No. 34-0006 (TEMP)).

Compensation paid under this change order includes but is not limited to all costs associated with the following 6 items of work:

1) Performing the lowering of the Span YB4 truss including furnishing, installing, and removing all equipment and material necessary to perform the lowering of the truss in accordance with the plans submitted (Document No: 215-SUB.00378-00) by Mammoet USA Inc. including any subsequent revisions to this plan as required for approval by the Engineer. This work includes but is not limited to furnishing and installing the gantry system including all strand jacks; all lifting towers; all foundations; all lifting beams, strandjack beams, gantry beams and cross beams; all bracing; all mid-span frames and all appurtenances.

2) Performing the transport of Bent 1 and Bent 2 towers of both Skid Bent A and Skid Bent B of the East Tie-In (ETI) portion of the Temporary Bypass Structure (Bridge No. 34-0006 (TEMP)) including furnishing, installing, and removing all equipment and material necessary to remove the obstruction these bents present to the lowering of the Span YB4 truss as specified under Item No. 1 above. This work shall be performed in accordance with the plans submitted (Document No: 215-SUB.00432-00) by Mammoet USA Inc. including any subsequent revisions to this plan as required for approval by the Engineer.

3) Disconnecting Skid Beam Segment A1 and Segment B1 of the East Tie-In (ETI) portion of the Temporary Bypass Structure (Bridge No. 34-0006 (TEMP)) to allow for these segments to be lowered with the Span YB4 truss as specified under Item No. 1 above and then disconnecting the segments from the Span YB4 truss after it has been lowered.

4) Provide for the furnishing, installation and removing all falsework to support the Span YB4 truss after it has been lowered as specified under Item No. 1 above and in accordance with the plans submitted (Document No: 215-SUB.00399-02) by the Contractor including any subsequent revisions to this plan as required for approval by the Engineer.

5) Performing all bridge removal work associated with the demolition and disposal of the Span YB4 truss after it has been lowered onto falsework as specified under Item No. 1 above in accordance with the plans submitted (Document No: 215-SUB.00384-00) by the Contractor including any subsequent revisions to this plan as required for approval by the Engineer.

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 177	Suppl. No. 0	Contract No. 04 - 0120R4	Road SF-80-12.6/13.2	FED. AID LOC.: ACBRIM-080-1(097)N
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6) Performing all earthwork, grading and backfilling of foundations necessary for the work of Item No. 1 through 5 above.

For this work, the Contractor shall be compensated a lump sum of \$12,709,560.00. Except for the items of work specifically excluded in this change order, this sum constitutes full and final compensation, including all markups, for all costs associated with the work of this change.

All costs associated with the following 3 items of work are excluded from this change order:

7) Performing all bridge removal work associated with the demolition and disposal of the skid bents and beams of the East Tie-In (ETI) portion of the Temporary Bypass Structure (Bridge No. 34-0006 (TEMP)) including for the demolition and disposal of Skid Beam Segment A1 and Segment B1 that are lowered with the Span YB4 truss.

8) Performing the demolition and disposal of all concrete foundations pertaining to the lowering of the Span YB4 truss (Item No. 1 above) and all concrete foundations pertaining to the falsework that supports the Span YB4 truss after it has been lowered (Item No. 4 above).

9) Performing any backfill of the ETI area beyond that specified under Item No. 6 above.

Any costs associated with these 3 items of work shall be paid under separate change orders.

Flagging costs associated with the work of this change shall be paid under Change Order No. 1 with these costs being paid at 50% by the Department. The remaining flagging costs are considered to be included in the lump sum compensation provided under this change order.

The compensation paid under this change order includes all engineering and survey costs associated with the work of this change order and no additional compensation shall be paid.

The compensation provided under this change order is based on traffic being placed on the Temporary Bypass Structure no later than 5:00 AM on September 8, 2009. Should this traffic placement be delayed beyond this time, the Contractor may be compensated for any additional costs incurred due to this delay.

Total Cost of Extra Work at Lump Sum\$12,709,560.00

Estimated Cost: Increase ☒ Decrease ☐ \$11,249,560.00

By reason of this order the time of completion will be adjusted as follows: Deferred

Submitted by

Signature	Resident Engineer BILL CASEY	Date
-----------	---------------------------------	------

Approval Recommended by

Signature	SFOBB Construction Manager MIKE FORNER	Date
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Engineer Approval by

Signature	SFOBB Construction Manager MIKE FORNER	Date
-----------	---	------

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature	(Print name and title)	Date
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CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO 217	Suppl. No. 0	Contract No. 04 - 0120R4	Road SF-80-12.6/13.2	FED. AID LOC.:
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To: CC MYERS INC

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Extra Work at Lump Sum:

Perform all work as specified within this change order pertaining to the demolition and removal of the skid bent and beam of the East Tie-In portion of the Temporary Bypass Structure (Bridge No. 34-0006 (TEMP)).

Compensation paid under this change order includes all costs associated with the following 6 items of work:

- 1) Performing all bridge removal work associated with the demolition and disposal of the skid bent system, including all skid bents, beams, walkways and appurtenances, of the East Tie-In. This work includes the demolition and disposal of Skid Beam Segment A1 and Segment B1 after being lowered with the Span YB4 truss and the demolition and disposal of Bent 1 and Bent 2 towers of both Skid Bent A and Skid Bent B after they are transported to allow for the lowering of the Span YB4 truss.
- 2) Performing all bridge removal work associated with the demolition and disposal of the 8 structural steel supports installed between the bottom chord and the skid beam for both the YB4 and ETI trusses that were installed under Change Order No. 171.
- 3) Performing all bridge removal work associated with the demolition and disposal of skid bent foundation B2W.
- 4) Performing all bridge removal work associated with the demolition and disposal of the 4 concrete falsework foundations constructed to support the lowered Span YB4 truss. The 4 concrete foundations to be removed consist of the 2 eastern concrete pads of falsework Bent 8 and the 2 foundations for falsework Bent 9 that support the north and south truss falsework.
- 5) Performing all bridge removal work associated with the demolition and disposal of the 7 concrete foundations constructed to support the gantry system used to lower the Span YB4 truss onto falsework. The foundations to be removed include all foundations for the Skid Beam A gantry towers excluding the large foundation constructed above skid bent foundations A1W and A1E and the 2 minor foundations constructed between skid bent foundations A3W and A3E and all foundations for the Skid Beam B gantry towers excluding the 2 minor foundations constructed between skid bent foundations B1W and B1E.
- 6) Performing any repair work to the Bent W3R footing necessary due to any damage incurred during the demolition of the concrete foundations specified under Items No. 3 and No. 5 above.

For this work, the Contractor shall be compensated a lump sum of \$3,152,900.00. Except for the items of work specifically excluded in this change order, this sum constitutes full and final compensation, including all markups, for all costs associated with the work of this change.

Under the terms of this change order, the Contractor assumes full ownership of all materials being removed.

Total Cost of Extra Work at Lump Sum\$3,152,900.00

This change order excludes any costs associated with the backfill of the ETI area. Any costs associated with this work shall be paid under a separate change order.

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO 217	Suppl. No. 0	Contract No. 04 - 0120R4	Road SF-80-12.6/13.2	FED. AID LOC.:
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Flagging costs associated with the work of this change shall be paid under Change Order No. 1 with these costs being paid at 50% by the Department. The remaining flagging costs are considered to be included in the lump sum compensation provided under this change order.

The compensation paid under this change order includes all engineering and survey costs associated with the work of this change order and no additional compensation shall be paid.

Estimated Cost: Increase ☒ Decrease ☐ \$3,152,900.00

By reason of this order the time of completion will be adjusted as follows: 0 days

Submitted by		
Signature	Resident Engineer BILL CASEY	Date

Approval Recommended by		
Signature	SFOBB Construction Manager MIKE FORNER	Date

Engineer Approval by		
Signature	SFOBB Construction Manager MIKE FORNER	Date

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by		
Signature	(Print name and title)	Date

CONTRACT CHANGE ORDER MEMORANDUM

DATE: 9/16/2009 Page 1 of 2

TO: MIKE FORNER / DEANNA VILCHECK			FILE: E.A. 04 - 0120R4	
FROM: BILL CASEY			CO-RTE-PM SF-80-12.6/13.2	
FED. NO.				
CCO#: 217	SUPPLEMENT#: 0	Category Code: CHPT	CONTINGENCY BALANCE (incl. this change) \$48,731,483.59	
COST: \$3,152,900.00 INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>			HEADQUARTERS APPROVAL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
SUPPLEMENTAL FUNDS PROVIDED: \$0.00			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
CCO DESCRIPTION: Skid Bent & ETI Foundation Demolition			PROJECT DESCRIPTION: CONSTRUCT ROUTE 80 TEMP BYPASS STRUCTURE	
Original Contract Time: 475 Day(s)	Time Adj. This Change: 0 Day(s)	Previously Approved CCO Time Adjustments: 1195 Day(s)	Percentage Time Adjusted: (including this change) 252 %	Total # of Unreconciled Deferred Time CCO(s): (including this change) 7

THIS CHANGE ORDER PROVIDES FOR:

the demolition and disposal of the East Tie-In skid bent system.

This project was awarded in March 2004 to construct a detour that will allow for the tie in of the new east span of the San Francisco Oakland Bay Bridge to Yerba Buena Island. The detour encompasses three main structures, the East Tie-In (ETI) to the existing bridge, the West Tie-In (WTI) to Yerba Buena Island and the Viaduct structure between the two tie ins.

The original contract was awarded as a performance based contract with the contractor responsible for the design of the structures based upon meeting specified design criteria. The Department issued a December 14, 2006 memo entitled Strategy for South-South Detour Contract Completion which was approved by Tony Anziano (Toll Bridge Program Manager), Richard Land (Chief Engineer) and subsequently by the TBPOC. This memo recommended that the design of the ETI structure be assumed by the Department as opposed to the as-bid performance based contractor design.

The new design of the ETI structure provides for a roll-out / roll-in concept with a new double deck steel truss span being erected adjacent to the existing span and then rolled into place after the existing span is rolled out. As part of this work, a skid bent system has been constructed to provide for the roll out of the existing truss and the roll in of the new truss. This change order provides for the demolition and disposal of the skid bent system.

The work encompassed under this change includes the demolition of over 3,000 metric tons of steel members including 24 steel tower legs up to 1.5 meters in diameter and 45 meters high and 2 approximately 100 meter long skid beams weighing over 4 metric tons per meter all being supported by extensive steel bracing and supports. The work also includes the demolition of 12 reinforced concrete foundations totaling to approximately 360 cubic meters of concrete and the demolition of 8 structural steel members that were installed to provide stability to the existing and new trusses during their roll out and roll in.

Compensation for the work of this change shall be paid as extra work at an agreed lump sum price of \$3,152,900.00 which shall be financed from the contract's contingency funds. A cost analysis is on file.

Under the terms of this change order, the contractor assumes ownership of the structural steel associated with the skid bent removal. A commensurate credit for the salvage value of this steel, based on the current market value, is provided within the agreed lump sum compensation being paid.

No adjustment of contract time is warranted as the change does not affect the controlling operation.

This change was concurred with by Alec Melkonians - Asst. Project Manager and Hong Wong - Project Engineer. TBPOC Approval is pending.

Maintenance concurrence is not required as the work will not affect and permanent roadway items.

CONCURRED BY:			ESTIMATE OF COST		
Construction Engineer:	Bill Casey, Resident Engineer	Date	THIS REQUEST		TOTAL TO DATE
Bridge Engineer:		Date	ITEMS	\$0.00	\$0.00
Project Engineer:	Hong Wong, PE	Date	FORCE ACCOUNT	\$0.00	\$0.00
Project Manager:	Alec Melkonians	Date	AGREED PRICE	\$3,152,900.00	\$3,152,900.00
FHWA Rep.:		Date	ADJUSTMENT	\$0.00	\$0.00
Environmental:		Date	TOTAL	\$3,152,900.00	\$3,152,900.00
Other (specify):		Date	FEDERAL PARTICIPATION		
Other (specify):		Date	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE		
District Prior Approval By:		Date	<input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING		
HQ (Issue Approve) By:	Bob Molera, HQ CCO Engineer	Date	FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type)		
Resident Engineer's Signature:		Date	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS		
			FEDERAL FUNDING SOURCE PERCENT		

Yerba Buena Island Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
October 6, 2009

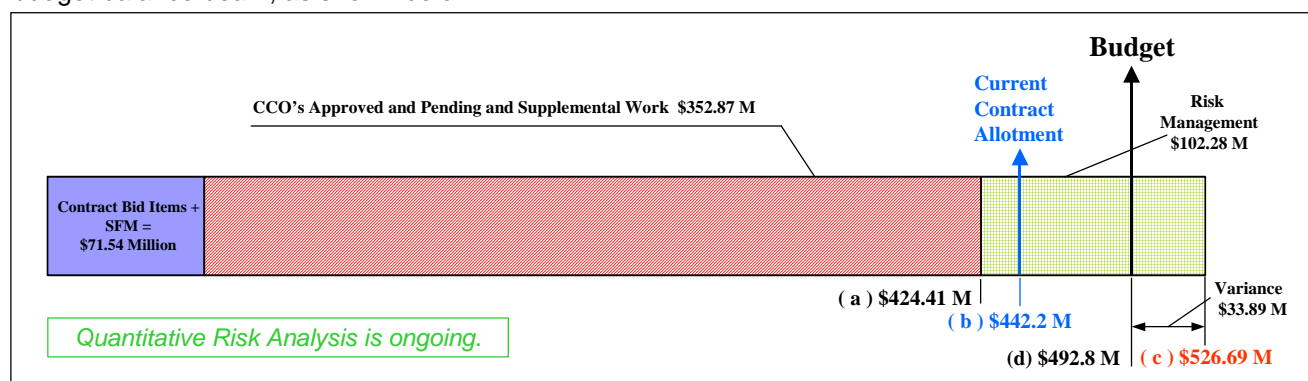
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Yerba Buena Island Detour (Contract 04-0120R4)			
Contract Award:	March 10 th , 2004	Suspension Days:	302 Working Days
Original Working Days:	475 Working Days	Contract Extensions:	1660 Working Days
Original Contract Completion:	July 27th, 2005	Projected Contract Completion:	December 10, 2010

Introduction

Two memos were developed to outline a strategy for a revised YBID project that enhanced YBID viaduct design, developed tie-in design (east and west) in-house, improved the retrofit of the YBI viaduct (replacing the top deck of the viaduct rather than retrofitting in place) and advanced and incorporated select YBITS foundation work. The two memos are "San Francisco-Oakland Bay Bridge Corridor Schedule Mitigation – Strategy for South-South Detour Contract Completion" issued December 14, 2006, and "Recommendation to Construct Select Yerba Buena Island Transition Structure Foundations by Contract Change Order" issued on December 25, 2006. This strategy will result in substantial increases in the cost of the YBID project.

As approved at the June 2009 TBPOC meeting the revised budget for the YBID project is 492.8M. This figure was established in May 2009 using all available information to date. This figure is within the projects approved budget balance beam, as shown below:



Scope of Work for YBID

The revisions to the original scope of work currently associated with the Yerba Buena Island Detour Project have been assigned into the following categories with their associated estimated cost:

Category	Scope of Work	Current Budget (June 2009)	In Progress Status Update from June 09 Approved Budget	
			Current	Delta
(0)	Original Bid Items, Baseline CCOs (1 through 48), and State Furnished Materials	\$83.7	\$83.7	\$0
(1)	YBID New Viaduct	\$40.1	\$40.6	\$0.5
(2a)	West Tie-In Existing Viaduct Phase 1	\$40.1	\$40.1	\$0.0
(2b)	West Tie-In Phase 2	\$21.8	\$18.0	(\$3.8)
(3)	East Tie-In	\$140.0	\$142.2	\$2.2
(4)	YBI Transition Structures Advance Foundations	\$104.3	\$103.3	(\$1.0)
(5)	Administrative Issues and General CCOs	\$37.8	\$37.1	(\$0.7)
Subtotal		\$467.8	\$465.0	(\$2.8)
Contingency		\$25.0	\$27.8	
Approved Budget		\$492.8		

Contract payments as of September 20, 2009: \$390.9M

As shown, the current status of CCOs required to modify the original scope of the YBID work as defined in Categories 1 through 5 is \$381.3M. The status of each category of work is discussed in the succeeding pages of this report.

Yerba Buena Island Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
October 6, 2009

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Bid Items, Baseline CCOs, & State Furnished Material

0

The break down of Category (0) is as follows:

Original Contract Amount	\$ 71.2 million
Baseline CCOs (1 through 48)	\$ 12.1 million
State Furnished Materials	\$ 0.4 million
Total	\$ 83.7 million

Baseline Contract Change Orders (1 through 48)

CCO #	Description	Executed Date	Cost	CCO #	Description	Executed Date	Cost
1	Flagging and Traffic Control	5/13/2004	\$100,000.00	24S1	Read Inclinometer/Adjust Equipment Costs	10/18/2005	\$29,782.99
1S1	Additional Funds for Flagging and Traffic Control	2/9/2007	\$200,000.00	24S2	Temporary Suspension Partially Extended	5/2/2006	\$4,812,631.58
2	Bidder Compensation	5/8/2004	\$1,575,000.00	24S3	Contract Days Extension/TRO Compensation	Voided	N/A
3	Partnering	9/7/2004	\$25,000.00	25	Bent 48, 49R, 52R Outside Boundary	3/24/2005	(\$19,000.00)
4	DRB	9/7/2004	\$100,000.00	26	Bent 48 Articulation	4/22/2005	\$0.00
5	Federal Trainee Program	11/12/2004	\$20,000.00	27	Bent 52L Footing Conflict	1/19/2006	\$94,386.51
5S1	Non-Journey Person Training	3/10/2005	\$50,000.00	28	Hydroseed Around W2 Columns	3/24/2005	\$20,000.00
6	Removal of DBE/SBE Monitoring	2/10/2005	\$0.00	29	Replacement of Surveillance Camera	3/24/2005	\$3,542.00
7	Sampling and Analysis Work	8/30/2004	\$30,000.00	30	Additional Elastic Response Analysis	5/31/2005	\$10,700.00
8	SWPPP Maintenance Sharing	8/30/2004	\$75,000.00	31	Soil Analysis Outside Plan Limits	6/27/2005	\$20,000.00
9	Additional Photo Survey/Public Relations	9/14/2004	\$50,000.00	32	SFPUC Permit Specification Change	5/17/2005	\$0.00
10	Temporary Shuttle Van Service	7/16/2004	\$650,000.00	33	Design Enhancements	Voided	N/A
10S1	Additional Funds for Temporary Shuttle Van Service	6/23/2005	\$100,000.00	34	Pole Structure Welding Specification Revision	9/30/2005	\$0.00
10S2	Additional Funds for Temporary Shuttle Van Service	1/12/2007	\$500,000.00	35	Revision of East Tie-In Design Criteria	Voided	N/A
11	Utility Potholing	9/14/2004	\$100,000.00	36*	Extend Limits of Viaduct Demolition	Voided	N/A
12	Just-In-Time Training (RSC Pavement)	2/10/2005	\$5,000.00	37	4 Hr Emergency Travel Way	Voided	N/A
13	PMIV Document Management System	11/3/2004	\$486,743.50	37S1	Emergency Travel Way Falsework	Voided	N/A
14	Temporary Suspension	5/19/2004	\$0.00	38	Revision of West Tie-In Design Criteria	8/4/2005	\$0.00
15	Archaeology Investigation	7/19/2004	\$30,000.00	39	Provide Shuttle Service to USCG	6/27/2005	\$10,000.00
15S1	Additional Funds for Archaeology Investigation	4/22/2005	\$15,000.00	40	Sewer Pipe Material Change	9/26/2005	\$1,561.95
16	Roadway Profile at WTI	Voided	N/A	41	Bent 49L Utility Relocation	Voided	N/A
17	Modify Drainage at G4 Entry Vault	10/24/2006	\$108,217.45	42	Bent 48R Pile Load Test	9/12/2005	\$20,000.00
18	Access Control Measures	9/8/2004	\$50,000.00	42S1	Bent 52R Pile Load Test	12/15/2005	\$5,000.00
19	EDR1 Alignment Modification	5/12/2005	\$0.00	43	Material On Hand Specification Change	9/16/2005	\$75,953.88
20	A490 Bolts	10/23/2006	\$0.00	43S1	Addition of YBITS Advance to Material On Hand	Voided	N/A
21	Removal /Disposal of Stairway	4/13/2005	\$14,060.00	44	Electrical Call Box Relocation		\$47,480
22	Clean Stairs and Walkways	5/24/2005	\$35,000.00	45	Additional SWPPP	2/21/2006	\$250,000.00
22S1	Additional Funds for Cleaning Stairs and Walkways	11/24/08	\$25,000.00	46	Southgate Road Reopening	3/8/2006	\$50,000.00
23	Shared Field Data System (ShareArchive)	Voided	N/A	47	Hazardous/Non-Hazardous Soil Removal	12/15/2005	\$100,000.00
24	East and West Tie-In Temporary Suspension	2/1/2005	\$2,181,467.40	48	Buried Man-Made Objects	12/15/2005	\$50,000.00
Total for Baseline Contract Change Orders				\$12,107,527			

- The scope of work for CCO No. 36 was completed and compensated for under the larger scope of CCO No. 76.

Yerba Buena Island Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
October 6, 2009

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SSD New Viaduct

1

Progress of Work

Fabrication of the structural steel truss took place at Dongkuk S&C in South Korea. With the placement of traffic onto the detour, the construction of the Viaduct is substantially complete. Minor punch list work remains.

Status of Contract Change Orders: YBID New Viaduct:

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from June 09 Approved Budget
49	LS	Stringer and Floor Beam Design Study	N/A	N/A	Executed 5/2/2006	\$109,183	
49S1	FA	Truss Design Modifications (Changes to Stringer and Floor Beam Connections)	I&A 12/08/06	N/A	Executed 8/17/2006	\$150,000	
49S2	FA		I&A 12/08/06	N/A	Executed 12/18/2006	\$100,000	
Subtotal (CCO #49 and Supplements)						\$359,182	
50	FA	Stand Alone Viaduct Design	N/A	N/A	Executed 5/8/2006	\$325,000	
50S1	FA		I&A 9/21/06	N/A	Executed 10/16/2006	\$300,000	
50S2	FA		I&A 12/08/06	N/A	Executed 12/18/2006	\$100,000	
50S3	FA		I&A 2/09/07	N/A	Executed 2/13/07	\$175,000	
Subtotal (CCO #50 and Supplements)						\$900,000	
54	LS	Deck Drainage	N/A	N/A	Executed 5/2/07	\$8,000	
55	LS	Viaduct Fabricator Change (SGT Closeout)	I&A 7/08/07	Approved 6/27/07	Executed 8/7/07	\$5,665,330	
55S1	LS	SGT Fabrication Closeout - Dongkuk Materials	I&A 1/24/08	Approved 3/5/08	Executed 3/17/08	\$980,600	
59	LS	Water Blast Rebar Cages	N/A	N/A	Executed 2/22/07	\$5,000	
59S1	LS	Additional funds, Water Blast Rebar Cages	N/A	N/A	Executed 11/24/08	\$5,000	
60	LS	Construction of Bent Caps	I&A 6/13/07	Approved 6/27/07	Executed 6/18/07	\$7,435,950	
67	FA	Viaduct/ETI Interface Modifications (Design Cost)	I&A 5/14/07	N/A	Executed 9/27/07	\$800,000	
79	LS	Fabrication Cost for Viaduct Design Changes July '05 - October '06	I&A 7/19/07	N/A	Executed 8/7/07	\$803,400	
79S1	LS	Fabrication Cost for Viaduct Design Changes - July 05-Oct 06	I&A 6/13/08	N/A	Executed 8/4/08	\$75,860	
80	LS	Erection Costs for Viaduct Design Changes through October 2006	N/A	Approved 1/31/08	Executed 2/20/08	\$6,912,200	
82	FA	OGAC Paving and Expansion Dams		N/A	In progress	\$327,680	\$181,386
213	LS	Bent 48 Expansion Joint & Drainage Escalation	I&A 7/23/09	N/A	Executed 8/06/09	\$488,100	
85	LS	Design of 300mm Waterline Relocation	N/A	N/A	Executed 3/17/08	\$12,480	
87	LS	Viaduct Shipping Escalation Costs	I&A 7/24/07	N/A	Executed 10/2/07	\$534,570	
87S1	LS	Viaduct Shipping Escalation Costs	I&A 1/14/08	N/A	Executed 1/30/08	\$200,000	
88	LS	Viaduct Fabrication Delays	I&A 7/19/07	N/A	Executed 8/7/07	\$954,460	
88S1	LS	Viaduct Fabrication Delays	I&A 8/22/07	N/A	Executed 9/27/07	\$776,630	
98	FA/LS	Viaduct Steel Storage and Handling Cost	I&A 5/30/08	N/A	Executed 6/18/08	\$845,370	
99	LS	Viaduct Erection Costs (Post Oct. 2006)	I&A 4/17/08	N/A	Executed 5/22/08	\$862,614	

Yerba Buena Island Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
October 6, 2009

DRAFT

99S1	LS	Additional Viaduct Erection Costs		N/A	In progress	\$125,000	
100	FA	Viaduct Fabrication Costs (Post Oct. 2006)	I&A 1/22/08	N/A	Executed 1/28/08	\$650,000	
105	FA/LS	Dongkuk Fabrication and Temp Bracing Fabrication Costs (July 2007 Plans)	I&A 4/2/08	Approved 4/3/08	Executed 4/17/08	\$2,140,640	
106	-	CCO Voided...previous scope of work was incorporated into CCO 105	-	-	-	-	-
107	LS	Furnish and Drive Erection Tower Falsework Piles	I&A 8/07/08	N/A	Executed 10/02/08	\$855,190	
111	FA/LS	USCG Parking Replacement and Protection	N/A	N/A	Executed 3/17/08	\$163,223	
111S1	LS	Additional costs USCG Parking Lot	N/A	N/A	Executed 6/30/08	\$8,940	
111S2	LS	Additional costs USCG Car Port Canopy	N/A	N/A	Executed 4/23/09	\$120,000	\$120,000
111S3	LS	Additional costs USCG Car Port Canopy	N/A	N/A	In progress	\$80,000	\$80,000
115	FA	Third VIA Shipping for CCO #67 July 07 plans	I&A 5/06/08	N/A	Executed 5/22/08	\$850,000	
128		60% of Waterline Relocation and Viaduct Connection Modifications		N/A	In progress	\$863,590	
133	-	Lightweight Conc. Mix Design Spec Change	N/A	N/A	Executed 9/12/08	\$0	
134	LS	60% of Project Wide Electrical Changes	7/7/09	Approved 5/7/09	Executed 8/25/09	\$1,380,554	
196	LS	Revised Electrical Lighting	N/A	N/A	Executed 7/28/09	\$35,944	(\$174,056)
135	LS	Rebar Deck Escalation Costs	I&A 11/09/08	N/A	Executed 1/28/09	\$995,100	
136	FA/LS	Provide additional alternate entrance access to USCG Base	N/A	N/A	Executed 9/23/08	\$74,540	
138	LS	Waterline Relocation for Fire Hydrant (Conflicts with Span 49 Falsework)	N/A	N/A	Executed 9/23/08	\$278,200	
148	FA	USCG Road Canopy below Viaduct	I&A 8/27/08	N/A	Executed 9/23/08	\$500,000	
152	LS	Relocate USCG Road for steel erection FW Towers at Span 51	I&A 1/06/09	N/A	Executed 2/4/09	\$336,420	
156	LS	Span 49 F/W Conflict w/ USCG Utilities	N/A	N/A	Executed 9/23/08	\$180,820	
163	LS	Viaduct Grade Conflict	N/A	N/A	Executed 6/12/09	\$83,202	(\$16,798)
173		Deck Casting and Expansion Joint Escalation		TBD	In Progress	\$1,000,000	
178	LS	Type 7 Fence at Barrier	I&A 7/31/09	N/A	Executed 8/25/09	\$457,356	\$374,176
198		Job Wide Stripping Plan (Viaduct Portion)		TBD	In Progress	\$90,000	
199		Install Overhead Sign		TBD	In Progress	\$100,000	
201		Viaduct Steel Erection USCG Protective Netting		N/A	In Progress	\$156,350	(\$73,650)
209	LS	Viaduct USCG Flagging & Delays (Span 51)	N/A	N/A	Executed 8/13/09	\$92,810	(\$47,190)
Current Forecast for YBID New Viaduct						\$40,570,306	\$443,868

Budget Status

The Viaduct portion of the YBID was bid at \$26.74M. The projected additional costs in the December 14, 2006 Strategy Memorandum were estimated to be \$9M. The June 2009 revised additional cost estimate is \$40.1M with a current projection of \$40.6M. CCOs executed to date are \$37.8M.

West Tie-In

Phase 1

2a

Phase 1 work was substantially complete with the move in of the Structure on September 03, 2007. Miscellaneous electrical and drainage work remain. WB On-ramp was reopened on August 8, 2008.

Yerba Buena Island Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
October 6, 2009

DRAFT

Status of Contract Change Orders: West Tie-In Existing Viaduct (Phase 1)

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from June 09 Approved Budget
58	FA	Bridge Removal Plan	N/A	N/A	Executed 11/21/06	\$60,000	
58 S1	FA	Bridge Removal Plan	N/A	N/A	Executed 7/05/07	\$40,000	
61	FA	Advance Engineering (Work Plans and Submittals), Site Prep (Ramp Closures, Access Road), Civil Work (Grading), Structure Work (Material Procurement)	I&A 1/09/07	N/A	Executed 2/27/07	\$400,000	
61S1	LS/FA	Construction of Stage 1 Area and Substructure	I&A 5/16/07	Approved 6/27/07	Executed 5/18/07	\$9,995,644	
66	FA	TMP – Video Equipment (WTI Phase 1)	N/A	N/A	Executed 7/20/07	\$175,000	
68	FA	Temporary Electrical Work	N/A	N/A	Executed 7/20/07	\$140,000	
68S1	FA	Temporary Electrical Work Stage 2, 3 & 4	I&A 12/02/07	N/A	Executed 10/31/07	\$510,000	
72	LS	Structure Work (Superstructure), and Temporary Shuttle Service	I&A 7/19/07	Approved 7/27/07	Executed 7/20/07	\$11,096,900	
76	LS	Labor Day Bridge Demolition and Move-In	I&A 7/19/07	Approved 7/27/07	Executed 7/20/07	\$2,240,300	
76S1	LS	Labor Day Bridge Move-In (Changeable Message Signs, Temporary Signs, Traffic Control, Bridge Removal, Bridge Move-In, Paving and Roadway Repairs, CCM Support Costs, City Traffic Officers)	I&A 8/28/07	Approved 8/24/07	Executed 9/27/07	\$10,144,140	
84	LS	Skid Track Foundations and Temporary Columns	I&A 7/27/07	Approved 7/27/07	Executed 7/31/07	\$3,980,000	
101	LS	Reconstruct Slab, West Bound On-ramp	I&A 4/02/08	N/A	Executed 4/17/08	\$846,140	
101S1	LS	WB Onramp Supplemental Work	I&A 1/06/09	N/A	Executed 2/4/09	\$149,560	
102	FA	Northside Drainage Work	N/A	N/A	Executed 4/4/08	\$60,000	
102S1	LS	Northside Drainage Work	N/A	N/A	Executed 7/15/09	\$48,818	\$46,578
102S2	FA	Additional Northside Drainage Work	N/A	N/A	Executed 7/15/09	\$50,000	
103	LS	Labor Day Weekend Closure Misc. Costs	N/A	N/A	Executed 2/20/08	\$173,140	
Current Status for West Tie-In (Phase 1)						\$40,109,642	\$46,578

Budget Status

The projected additional costs in the December 14, 2006 Strategy Memorandum were estimated to be \$40M. The June 2009 revised additional cost estimate is \$40.1M with a current projection of \$40.1M. CCOs executed to date are \$40.1M.

West Tie-In

Phase 2

2b

Progress of Work

With the placement of traffic onto the detour, Frames 1, 2, and 3 are substantially complete. Minor punch list work, including the installation of south side drainage system, remains.

Status of Contract Change Orders: West Tie-In (Phase 2)

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from June 09 Approved Budget
62	LS	Construction of Phase 2 Foundations and Credits for Elimination of Bid Items 12 and 90	I&A 2/29/08	Approved 4/4/08	Executed 4/7/08	(\$4,649,850)	

Yerba Buena Island Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
October 6, 2009

DRAFT

200		Shoring at Abutment 47A		TBD	In Progress	\$300,000	
71	LS	WTI Phase 2 Pile at Bent 46L/Slab Bridge Removal	I&A 7/24/07	N/A	Executed 7/20/07	\$384,130	
108	LS	Substructure	I&A 6/20/08	Approved 6/18/08	Executed 6/25/08	\$5,378,800	
117	FA	Surface Drainage (Southside)	N/A	N/A	Executed 1/6/09	\$150,000	
128		20% of Waterline Relocation and Stringer Stiffeners		N/A	In progress	\$154,530	
134	LS	20% of Project Wide Electrical Changes	7/7/09	Approved 5/7/09	Executed 8/25/09	\$460,185	
196	LS	Revised Electrical Lighting	N/A	N/A	Executed 7/28/09	\$11,981	(\$58,019)
141	LS/FA	Superstructure Construction	I&A 11/13/08	Approved 11/18/08	Executed 11/25/08	\$13,200,000	
141S1	ACUP	Superstructure Construction Completion Incentive (Release of Frame 1 Bent Cap FW)	I&A 5/15/09	Approved 5/15/09	Executed 5/15/09	\$1,500,000	
143	LS/ID	Civil Work (EB Onramp and Mainline)	I&A 6/11/09	N/A	Executed 7/28/09	\$156,436	(\$3,680,814)
161	LS	T7-Line Detour	I&A 11/10/08	N/A	Executed 11/25/08	\$403,965	
168		Superstructure Design Modifications		TBD	In Progress	\$500,000	
198		Job Wide Stripping Plan (WTI Phase 2 Portion)		N/A	In Progress	\$70,105	
221		Barrier Rail Transition Cover Plate at B47		N/A	In Progress	\$25,000	\$25,000
Current Status for West Tie-In (Phase 2)						\$18,045,282	(\$3,713,833)

Budget Status

The Contractor's bid price for the West Tie-In was \$9.0M. Based on the Department's December 14, 2006 Strategy Memorandum, the costs associated with the Phase 2 West Tie-In work were estimated to be an additional \$13.0M. The June 2009 revised additional cost estimate is \$21.8M, with a current projection of \$18.0M. CCOs executed to date are \$17M.

East Tie-In

3

Bent 52A and skid bent foundation design packages were delivered October 2007. ETI design plans for the skid bents and skid beams were delivered March 15, 2008 and truss plans were delivered April 7, 2008.

Fabrication of the skid bents and skid beams took place at Thompson Metal Fab, Inc. in Vancouver, WA and the fabrication of the truss took place at Stinger Welding Inc. in Coolidge, AZ.

The existing SFPUC sanitary sewer pump station has been relocated with the new pump station up and running. The East Tie-In structure was successfully moved into place and traffic switch onto the detour on September 8, 2009.

Demolition of the old YB-4 span is in progress.

Status of Contract Change Orders: East Tie-In

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from June 09 Approved Budget
63	FA	Advance Engineering (Work Plans and Submittals)	I&A 8/22/07	N/A	Executed 9/27/07	\$800,000	
69	LS	Procurement of Pump/Control Panel for Pump Station Relocation	N/A	N/A	Executed 10/10/07	\$111,280	
69S1	LS	Construction for Pump and Control Panel for Relocated Pump Station	I&A 12/19/07	N/A	Executed 3/17/08	\$499,996	
69S2	LS	Sewer Pump Electrical Changes	I&A 2/25/09	N/A	Executed 4/08/09	\$8,953	
92	FA	ETI AT&T Fiber Optic Relocation	N/A	N/A	Executed 12/17/07	\$175,000	
93	LS/FA	Lead Paint Mitigation Existing Truss (Span YB-4)	I&A 2/13/08	N/A	Executed 2/20/08	\$563,725	
93S1	LS	Additional Lead Abatement at Span YB-4	I&A 6/8/09	N/A	Executed 6/17/09	\$347,417	(\$3)

Yerba Buena Island Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
October 6, 2009

DRAFT

93S2	LS	Additional Platform Rental and Adjustments		TBD	In progress	\$300,000	\$300,000
104	LS	Pier E-1 Access Towers	N/A	N/A	Executed 1/30/08	\$150,000	
113	LS	Relocate Waterline in Conflict with Northern Skid Bent Footings	N/A	N/A	Executed 3/17/08	\$167,990	
128		20% of Waterline Relocation and ETI Exterior Stringer Stiffeners		TBD	In progress	\$354,530	
137	LS	Pump station Water Tank Demo	N/A	N/A	Executed 6/26/08	\$114,490	
90	LS	Bent 52A and Skid Bent Footings and Credits for Eliminated Bid Items 10 and 42	I&A 3/26/08	Approved 4/4/08	Executed 4/14/08	\$11,308,380	
97	FA	Bent 52A and Skid Bent Footing's Material Procurement	I&A 11/06/07	N/A	Executed 11/19/07	\$850,000	
121	LS	Construct Stage 1 Soil Nail Wall, Upper East Tie-In area	N/A	N/A	Executed 3/17/08	\$142,670	
121S1	LS	Construct Stage 2 Soil Nail Wall, Upper East Tie-In area	N/A	N/A	Executed 3/18/09	\$518,130	
162	LS	Bent A3 Shoring	I&A 3/30/09	N/A	Executed 4/01/09	\$268,235	
180	LS	Skid Bent Footing Backfill at A4-A6 and B4-B6	I&A 5/20/09	N/A	Executed 6/12/09	\$237,000	
127	FA	RTU – 8 Service Platform	N/A	N/A	Executed 9/03/08	\$75,000	
134	LS	20% of Project Wide Electrical Changes	7/7/09	Approved 5/7/09	Executed 8/25/09	\$460,185	
196	LS	Revised Electrical Lighting	N/A	N/A	Executed 7/28/09	\$11,981	(\$58,019)
129	LS	Skid Bent and Truss Steel Erection	I&A 11/05/08	Approved 11/10/08	Executed 11/25/08	\$14,712,500	\$645,210
129S1	LS	Skid Bent and Truss Steel Erection Acceleration	I&A 3/09/09	Approved 3/5/09	Executed 4/01/09	\$535,000	
129S2	LS	Skid Bent and Truss Steel Erection Incentive	I&A 6/9/09	Approved 6/4/09	Executed 6/17/09	\$1,177,000	
179	LS	ETI Truss Steel Erection Falsework Foundations	I&A 4/20/09	N/A	Executed 4/08/09	\$312,000	
181		Skid Bent/Beam and Truss Erection Support		N/A	In Progress	\$500,000	
214		ETI Truss Steel Erection Closeout Costs		N/A	In Progress	\$645,210	
112	FA	Material Procure Skidbent (1532 Tower Legs)	I&A 1/10/08	Approved 2/4/08	Executed 2/19/08	\$2,000,000	\$1,349,560
112S1	FA	Material Procure ETI Superstructure	I&A 3/03/08	Approved 3/5/08	Executed 3/17/08	\$8,500,000	
112S2	FA	Material Procure ETI Temporary Bypass Structure	I&A 6/04/08	Approved 6/16/08	Executed 6/25/08	\$3,500,000	
112S3	FA	Material Procure - Additional Funds	I&A 10/31/08	Approved 11/13/08	Executed 11/25/08	\$3,000,000	
112S4	FA	Material Procure - Additional Funds	I&A 7/7/09	Approved 7/15/09	Executed 7/16/09	\$1,500,000	
116	FA/LS	Fabricate Superstructure & Skidbent	I&A 6/04/08	Approved 6/16/08	Executed 8/8/08	\$14,166,180	
116S1	FA/LS	Skidbeam Design Modifications and Shipping Costs	I&A 12/19/08	Approved 12/23/08	Executed 2/3/09	\$1,896,750	
116S2	FA/LS	Skidbeam Design Modifications and Shipping Costs	I&A 7/7/09	Approved 7/15/09	Executed 7/16/09	\$300,000	
140	LS	Truss Steel Fabrication	I&A 9/04/08	Approved 9/04/08	Executed 9/23/08	\$10,920,525	
140S1	ACUP	Truss Fabrication Incentive	I&A 6/17/09	Approved 9/04/08	Executed 7/6/09	\$300,000	
166	LS	Skid Bent & Beam Fabrication Acceleration	I&A 12/22/08	Verbal Approval 11/06/08 Approved 12/23/08	Executed 1/28/09	\$2,028,950	
166S1	ACUP	Skid Bent & Beam Fabrication Incentive	I&A 5/15/08	Approved 12/23/08	Executed 5/15/09	\$900,000	
167	LS	TMF – Shop Drawing Delay	I&A 3/16/09	N/A	Executed 5/6/09	\$632,670	

Yerba Buena Island Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
October 6, 2009

DRAFT

184	LS	Truss Design Modifications and Acceleration Costs (Partial Payment)	I&A 5/20/09	Approved 6/4/09	Executed 6/12/09	\$3,000,000	
184S1	LS	Truss Design Modifications and Acceleration Costs (Partial Payment)	I&A 7/31/09	Approved 8/6/09	Executed 8/11/09	\$4,393,420	
214		Truss Fabrication Acceleration Field Adjustments		N/A	In Progress	\$900,000	
187	FA	Temporary Bracing for Truss Exterior Stringers	N/A	N/A	Executed 7/16/09	\$150,000	
193	LS	Skid Beam Design Modifications	I&A 7/7/09	N/A	Executed 7/16/09	\$256,140	
206		DCCI Support Costs (Skid Bent Fabrication)		N/A	In Progress	\$200,000	
144	FA	Expansion Joint Mock-up	I&A 8/26/08	N/A	Executed 9/23/08	\$850,000	
144S1	FA	Expansion Joint Fabrication	I&A 2/03/08	Approved 2/5/09	Executed 4/06/09	\$2,900,000	
231		Expansion Joint Steel Skid Test Plates		N/A	In Progress	\$100,000	\$100,000
149	FA	Bearing Fabrication	I&A 11/03/08	Approved 11/10/08	Executed 11/25/08	\$1,600,000	
149S1	FA	Additional FA Funds for Bearing Fabrication / Testing		N/A	In Progress	\$400,000	\$400,000
153	LS	Concrete Deck and barrier starter steel	I&A 6/23/09	Approved 6/4/09	Executed 7/6/09	\$2,389,940	(\$378,266)
154	LS	East Pile Deduct at BW6, East Pile	N/A	N/A	Executed 9/04/08	(\$400)	
154S1	LS	Pile Anomaly Deduction at A6W & B52A	N/A	Approved 11/13/08	Executed 11/25/08	(\$2,183)	
160	FA	Existing Truss Retrofit Fabrication	I&A 4/20/09	N/A	Executed 4/08/09	\$350,000	
170		Existing Truss Strengthening Erection YB-4		N/A	In Progress	\$413,600	(\$336,400)
175	LS	Existing Truss Strengthening Erection Stability Bracing at YB 3	I&A 7/22/09	N/A	Executed 8/13/09	\$311,144	(\$188,856)
164	LS	ETI Steel Erection Crane Runway Trestle	I&A 11/20/08	ATP 11/14/08 Approved 12/23/08	Executed 12/6/09	\$2,700,000	
169	LS	Skid Beam Jobsite Handling and Local Transportation Costs	I&A 1/02/09	Approved 12/23/08	Executed 2/25/09	\$1,095,020	
171	LS	Bridge Roll Out / Roll In	I&A 6/8/09	Approved 6/4/09	Executed 6/17/09	\$10,147,370	(\$328,820)
172	LS	Lead Paint Abatement and Access at YB-3	I&A 12/18/08	N/A	Executed 2/4/09	\$210,450	
174	FA	ETI Steel Barrier Rail Transition Fabrication	I&A 5/20/09	N/A	Executed 6/17/09	\$350,000	
174S1		ETI Steel Barrier Rail Transition Fabrication Design Changes		N/A	In Progress	\$0	\$150,000
174S2		ETI Steel Barrier Rail Transition Fabrication		N/A	In Progress	\$150,000	
177		Span YB-4 Demolition		TBD	In Progress	\$11,249,560	
217		Skid Bent Demolition		TBD	In Progress	\$3,152,900	
212		YB4 Roll Out Cut Free Demolition		N/A	In Progress	\$209,720	\$2,007,276
227		ETI Backfill		TBD	In Progress	\$1,000,000	
186	LS	TMP (Lane Closures and CMS)	***	Approved 6/4/09	Executed 8/25/09	\$2,390,910	(\$609,090)
198		Job Wide Stripping Plan (ETI Portion)		TBD	In Progress	\$48,415	
		ETI OGAC on Bridge Deck		TBD	Future	\$0	
		District work – road signage, stage construction, SWPPP, Temp k-rail, etc		TBD	Future	\$268,125	
204	FA	CCM's Labor Day Support Costs	I&A 7/14/09	Approved 7/15/09	Executed 8/6/09	\$3,500,000	
		Expansion Joint Seal Installation (previously CCO 189)					
		ETI Steel Barrier Rail Transition Installation (previously CCO 190)					
		Stability Bracing at YBI (Previously CCO 175)					
		Bearing Installation (previously CCO 191)					
204S1		Barrier Rail Installation (previously CCO 202)		TBD	Future	\$1,400,000	

Yerba Buena Island Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
October 6, 2009

DRAFT

207	FA	Field Design Modifications Truss – Fabrication (U1, U8, L1, L8)	I&A 7/16/09	N/A	Executed 7/28/09	\$400,000	(\$874,590)
207S1		Additional Funds to Field Design Modifications Truss – Fabrication (U1, U8, L1, L8)		N/A	In Progress	\$100,000	
219		Field Design Modifications Truss – Erection (U1, U8, L1, L8)		N/A	In Progress	\$625,410	
Current Status for East Tie-In						\$142,201,288	\$2,178,002

Budget Status

The Contractor's bid price to construct the Contractor's design for the East Tie-In was \$6.0M with an additional \$1.46M to demolish the remaining portion of the ETI YB-4 span. The Department's December 14, 2006 Strategy Memorandum estimated an additional cost of \$34.0M to construct the Department's ETI roll out/roll in design concept. At the time, this estimate was based on minimal design information available. The June 2009 revised additional cost estimate is \$140.0M, with the current projection at \$142.2M. CCOs executed to date are \$120.2M.

Major cost increases to date are attributed to an increase in steel weight from the 65% to 100% designed plans, along with a market fluctuation in steel price, as well as additional costs to expedite the ETI construction work.

**Yerba Buena Island Transition Structures
Advance Foundations**

4

Progress of Work

The YBITS foundation and column locations being advanced are W3R/L, W4R/L, W5R/L, W6R/L, W7R/L, W7 Ramp and the temporary E.B. onramp abutment.

- W3 3L – substantially completed
3R – column (2nd lift of 2) in progress
- W4 4L – substantially completed
4R – column (3rd lift of 3) in progress
- W5 5L – 75 of 140 piles driven
5R – driving of shoring piles substantially completed
- W6 6L – substantially completed
6R North – column (3rd lift of 3) in progress
6R South – substantially completed
- W7 construction of the temporary soil nail wall and soldier pile shoring complete
7L North – excavation complete
7L South – substantially completed
7R – column (2nd lift of 3) in progress
Ramp – substantially completed
- EB On-ramp abutment – temporary shoring piles and permanent CIDH piles have been installed

Demolition of the main portion of the old structure (Bent 48 to YB4) is in progress.

Status of Contract Change Orders: YBI Transition Structures Advance Foundations

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from June 09 Approved Budget
64	FA	YBITS W3L Site Prep and Grading and Construct Access Road	N/A	N/A	Executed 1/8/07	\$150,000	
64S1	LS/FA	YBITS W3L Foundation and Column to Splice Zone, Integrated Shop Drawings for W3L, Concrete Washouts, 50% of Flagging, and Traffic Controls	I&A 3/13/07	Approved 2/15/07	Executed 4/4/07	\$5,835,000	
65	FA	Demo Exist Bridge Adv. Planning	N/A	Approved 4/14/08	Executed 4/18/08	\$175,000	\$11,540
65S1	LS	Demolish Exist Bridge (Bent 48 to YB-4)	I&A 4/06/09	Approved 5/7/09	Executed 5/21/09	\$9,227,660	
192	LS	Cable Bracing requires for Demolition of Spans YB-1, YB-2, and YB-3	N/A	N/A	Executed 8/13/09	\$111,540	

Yerba Buena Island Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
October 6, 2009

DRAFT

229		Maintenance Traveler Salvage	N/A	N/A	In Progress	\$100,000	
70	FA	Integrated Shop Drawings for Remaining YBITS Advance Locations (W3R, W4L/R, W5L/R, W6L/R, W7L/R, and W7 Ramp)	I&A 4/04/07	N/A	Executed 5/1/07	\$500,000	
70S1	FA	YBITS Advance – ISD 3R, 4R/L, 5R/L, 6R/L, 7R/L & ramp	I&A 1/17/08	N/A	Executed 1/30/08	\$450,000	
73	LS	YBITS W3R, W4R, W5R/L, W6R/L, and W7 Ramp Foundations and Columns	I&A 10/24/07	Approved 10/30/07	Executed 11/19/07	\$62,958,990	
75	LS	YBITS W7R/L Foundations and Columns	I&A 4/2/08	Approved 4/3/08	Executed 4/14/08	\$13,125,000	(\$839,190)
75S1	LS	Bent W7 Structure Backfill	I&A 7/7/09	Approved 7/15/09	Executed 7/31/09	\$910,810	
77	LS	YBITS W4L Foundations and Columns	I&A 6/13/07	Approved 7/27/07	Executed 7/20/07	\$7,125,000	
78	FA	Relocation of Sewer Force Main	N/A	N/A	Executed 7/17/07	\$125,057	
94	LS	YBITS Temp. EB Onramp Abutment Piles and Shoring	I&A 5/18/09	N/A	Executed 5/21/09	\$153,593	(\$246,407)
118	FA	Vibration & Elev. Monitoring at W5L	N/A	N/A	Executed 2/20/08	\$50,000	
118S1	FA/LS/ID	Nimitz House vibration monitoring	N/A	N/A	Executed 8/05/08	\$50,050	
120	LS/Credit	CIDH Pile Mitigation Deduct	N/A	N/A	Executed 3/17/08	(\$400)	
124	FA/LS	Seismic Monitoring & Column Grounding	I&A 10/16/08	N/A	Executed 11/25/08	\$353,975	
126	FA	YBITS Excavation / Hazmat Disposal	I&A 4/7/08	Approved 4/3/08	Executed 4/17/08	\$500,000	
145		Revised Mass Concrete Spec. (Elimination of requirement from CCO's 73 & 75)	7/22/09	N/A	Executed 8/25/09	\$0	
145S1		Credit for eliminated Mass Concrete Work		TBD	In Progress	(\$500,000)	
147	LS	Add Cost W4R Foundation Construction	N/A	N/A	Executed 7/21/08	\$25,024	
155	FA	Excess Soil Offhaul	I&A 8/13/08	N/A	Executed 9/03/08	\$500,000	
159	LS	Redesign Bent W7 Soil Nail Wall	I&A 11/10/08	N/A	Executed 5/21/09	\$916,280	
165	LS	W7 Soil Nail Wall Delay Costs	I&A 4/20/09	N/A	Executed 4/08/09	\$152,208	
185		HazMat Excavation for Bridge Removal	8/10/09	N/A	Executed 8/25/09	\$106,000	\$106,000
211	LS	Duct Bank Revisions	N/A	N/A	Executed 8/13/09	\$129,152	(\$20,848)
211S1		Duct Bank Air Line Base Rock	N/A	N/A	In Progress	\$50,000	
Current Status for YBI Transition Structures Advance Foundations						\$103,279,939	(\$988,905)

Budget Status

The Department's December 25, 2006 Strategy Memorandum estimated the cost to construct Bents W3R/L, W4R/L, W5R/L, W6R/L, W7R/L, and W7 Ramp to be \$107M. In addition, the temporary E.B. onramp abutment was added at a later date with no estimate revision. The Departments December 14, 2006 Strategy Memorandum estimated the additional demolition costs for the existing bridge (Bent 48 through YB-4) to be \$3.5M. The combined estimate for both was \$110.5M. The June 2009 revised additional cost estimate is \$104.3M with a current projection of \$103.3M. Total CCOs executed to date are \$103.7M.

Administrative Issues General CCOs

5

Progress of Work

Administrative issues that remain on the YBID contract are related to setting project milestones and determining time related overhead resulting from the contract time extensions, escalation costs, the increased scope of work, and other necessary changes to the contract. Additionally, costs for implementing COZEEP for the East and West Tie-Ins need to be accounted for.

Yerba Buena Island Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
October 6, 2009

DRAFT

The following list of target milestones has been incorporated into the project schedule. This information will be revised as more detailed schedule information is developed.

	Date	Status	Notes
W3L (foundation and column up to splice zone)	March 15 th , 2007	Complete	Finished 3/15/07
West Tie-In Phase 1 Viaduct Demo/Roll-In Complete	September 4 th , 2007	Complete	Finished 9/04/07
Access to W3R Available to CCM	January 2 nd , 2008	Partial access provided	Coordinating access with SAS
Upper East Tie-In Area Available to CCM (Revised October 2008)	December 2009	Partial access provided	Coordinating access with SAS
East Tie-In Roll-Out/Roll-In Complete (Revised October 2008)	September 7 th , 2009	Complete	Finished 9/8/09
Project Completion (Revised July 2009)	December 10, 2010		

The Department has extended TRO compensation at the original contract rate through September 1, 2009. The Contractor has completed a TRO audit. The Department is reviewing this information so that an appropriate TRO adjustment can be negotiated.

The Department continues to pursue a resolution to the remaining NOPC issues. Of the 18 NOPC issues, only three remain outstanding. Of the three it is anticipated that Viaduct CCO #128 will resolve NOPC #6, resolution of the existing structure demolition costs will resolve NOPC #15, and resolution of the TRO costs will resolve NOPC #18.

Status of Contract Change Orders: Administrative Issues

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from June 09 Approved Budget
1 S2	FA	Flagging & Traffic Control	N/A	N/A	Executed 12/5/07	\$200,000	
1S3	FA	Flagging & Traffic Control	N/A	N/A	Executed 7/2/08	\$300,000	
1S4	FA/LS	Flagging & Traffic Control	N/A	N/A	Executed 7/9/09	(\$57,580)	(\$57,580)
13S1	FA	PMIV Additional Funds	I&A 3/10/08	N/A	Executed 3/17/08	\$300,000	
39S1	FA	Additional Funds for Shuttle Service to USCG	I&A 3/18/09	N/A	Executed 3/30/2009	\$500,000	
45 S1	LS	Additional SWPPP	I&A 12/14/07	N/A	Executed 1/31/08	\$350,000	
51	LS	NOPC 12 & 13 Resolution	N/A	N/A	Executed 8/17/06	\$25,234	
52	0	Elimination of Contractor's Design of Tie-Ins	I&A 1/19/07	N/A	Executed 3/2/07	\$0	
53	FA	Handling and Storage of Material	I&A 11/06/06	N/A	Executed 12/8/06	\$240,000	
56	LS	Contractor's Design additional cost... Resolved NOPCs 2,3,4,8,9,10,11,14, and 16	I&A 2/20/08	Approved 3/5/08	Executed 3/17/08	\$6,837,310	
57	LS	Demolition of Building 206	N/A	N/A	Executed 10/18/06	\$22,378	
57S1	LS	Remove and Clear Building 254	N/A	N/A	Executed 6/4/07	\$10,572	
66S1	FA	Video/Photo Documentation Services Supplemental Funds	N/A	N/A	Executed 4/14/08	\$200,000	
66S2	FA	Video/Photo Documentation Services Supplemental Funds		N/A	In Progress	\$200,000	
86	LS	Additional Suspension Costs	N/A	N/A	Executed 5/19/08	\$42,764	
91	LS	Contract Days Extension/TRO Compensation to November 08	RPP 8/28/07	TBD	Executed 10/31/07	\$1,818,948	
91 S1	LS	Base Contract TRO Extension to September 1, 2009	I&A 10/25/07	Approved 10/30/07	Executed 11/16/07	\$8,463,159	
91 S2	LS	Base Contract TRO Extension to December 10, 2010		Approved 7/15/09	In Progress	\$5,494,737	
114		Global TRO Adjustment and TRO Audit		TBD	In Progress	\$6,505,263	

Yerba Buena Island Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
October 6, 2009

DRAFT

96	FA	SWPPP Steep Slope Stabilization Measures	N/A	N/A	Executed 1/4/08	\$190,000	
96S1	FA	Add Funds Shotcrete Slope at Bent 48	N/A	N/A	Executed 7/2/08	\$40,000	
109	FA	MEP Coordination	N/A	N/A	Executed 1/30/08	\$100,000	
110	FA	Geotech. Exploration Pads and Support	N/A	N/A	Executed 2/20/08	\$150,000	
119	FA/LS/ID/UP	Project Wide SWPPP	I&A 4/07/08	N/A	Executed 4/17/08	\$638,939	
123	FA	Treasure Island Yard Lot Rental	I&A 4/16/08	N/A	Executed 4/17/08	\$600,000	\$350,000
123S1		Additional Funds for Treasure Island Yard Lot Rental	N/A	N/A	In Progress	\$350,000	
125	FA	Project Access Paving	N/A	N/A	Executed 4/04/08	\$150,000	
125S1	FA	Additional Funds, Project Access Paving	I&A 6/12/08	N/A	Executed 6/25/08	\$35,000	
130	LS	Project Retention	I&A 4/07/08	N/A	Executed 4/14/08	\$136,510	
131	FA	Delete Permanent Erosion Control Items	N/A	N/A	Executed 5/6/09	(\$74,502)	
132	LS	Storm Damage Slope Repair (Resolved NOPC 17)	N/A	N/A	Executed 5/23/08	\$23,870	
139		Revised ESA's	N/A	N/A	Executed 5/23/08	\$0	
142	FA	Macalla Road Sinkhole Repair	N/A	N/A	Executed 7/18/08	\$150,000	
146	FA	Macalla Road Tree Trimming	N/A	N/A	Executed 7/21/08	\$50,000	
146S1	FA	Add Funds Macalla Road Tree Trimming	N/A	N/A	Executed 11/25/08	\$50,000	
151		Public Safety Spec Change (Suspended Load)	N/A	N/A	Executed 9/23/08	\$0	
157		USCG Access Mitigation Stairway Design to Quarters Above		N/A	Executed 1/28/09	\$150,000	
176	FA	Construction Staking	N/A	N/A	Executed 4/08/09	\$100,000	
		Non CCO Charges...COZEPP, lead survey, respirator training			In Progress	\$1,323,000	
182		USCG use parking lots at WTI area Quarters 8		TBD	In Progress	\$300,000	
188		Sound Control Requirements, pile driving restrictions (Specification Only)	6/23/09	N/A	Executed 8/25/09	\$100,000	
188S1		Sound Control Impacts to W6 & W7 Pile Driving		TBD	In Progress		
195	FA	USCG Stair Access to Quarters 9 along Goat Slope	7/31/09	N/A	Executed 8/25/09	\$500,000	(\$300,000)
203		SSD Base Camera's		TBD	In Progress	\$196,884	(\$503,116)
208		Permanent Gawk Screen on North Side Detour Rail – CCO Deleted				\$0	(\$200,000)
		PIO Office Labor Day Outreach		N/A	In Progress	\$200,000	
		Macalla Road Repairs		N/A	In Progress	\$200,000	
Current Status for Administrative and General CCOs						\$37,112,486	(\$710,696)

Budget Status

As of June 2009 the revised additional cost estimate for Time Related Overhead, escalation issues, and job wide changes is \$37.8M with the largest estimated cost being attributed to a global TRO adjustment. As Contract Change Orders for these items are negotiated, this estimate will be updated. Costs related to settlement of NOPC issues not captured here will be paid out of the contract contingency.

Total CCOs executed to date are \$22.2M.

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** October 8, 2009

FR: Dina Noel, Assistant Deputy Director Toll Bridge Program, CTC

RE: Agenda No. - 3c5,6,7

Item- San Francisco-Oakland Bay Bridge Project Updates
Self Anchored Suspension – CCO 24 -S0 and CCO 24 -S1: Rail &
Traveler System, CCO 126: Cable/OBG installation interface at Lift 12

Recommendation:
APPROVAL

Cost:

CCO 24 – Supplement 0:	\$750,000.00
CCO 24 - Supplement 1:	\$2,500,000.00
CCO 126:	\$2,000,000.00

Schedule Impacts:

CCO 24 - S0 and CCO 24 - S1: – None

CCO 126 – Currently, the schedule does not show this work as having any impact to the critical path. However, it has been identified by the Department and the Contractor as having the potential to impact the critical path in the future.

Discussion:

Contract Change Order #24 – S0 in the amount of \$750,000 pays for design changes made to the traveler support rail details on the SAS contract, and for the removal of the installed rail portion on the Skyway bridge. Removal of the installed rail portion on the Skyway bridge was necessary in order to install the newly approved I-beam shaped rail that will be used on the SAS contract. Implementation of this change will mitigate operational and safety concerns discovered during a rail test on the Skyway contract.

Contract Change Order #24 – S1 in the amount of \$2,500,000 covers changes to the remaining traveler components, including trollies, brake system, anti-skew devices, structural changes, paint, and epoxy coatings.

Memorandum

Contract Change Order #126 – in the amount of \$2,000,000 will cover expenses for additional fabrication, shipping, engineering, temporary supports, and field bolting, welding, painting and assembly work needed to install and compact the parallel wire strand (PWS), main cable, around the corner section of Lift 12 of the orthogonal box girder (OBG). Prior to load transfer, the cable should be in a “free hanging” position to allow for cable compaction. The contract plans omitted the necessary steps and details addressing the interference between the suspension cable and the OBG during construction. As a result, sections from 15 panel points of the OBG at lift 12 can not be completed during fabrication and will have to be field installed after erection and compaction of the main cable. The Department and the contractor have analyzed other alternatives and concur with this approach as being the best viable option.

Attachment(s):

1. Draft CCO 24 Supplements 0 and 1 and Draft CCO 126
2. Draft CCO 24 S0, S1, and CCO 126 Memorandum

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 0 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

To: **AMERICAN BRIDGE/FLUOR ENTERPRISES INC A JOINT VENTURE**You are directed to make the following changes from the plans and specifications or do the following for this contract. **NOTE: This change order is not effective until approved by****DRAFT**

CCO 024S0 - CCO v11 20090930 to TBPOC.doc

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is used. This last percentage shown is the net accumulated increase or decrease from the original quantity.

Modify traveler rails and hardware as shown on sheets three (3) through sixty-six (66) of this change order. This change includes, but is not limited to, the following:

- Change the traveler rail from an "S" shape beam to a built-up beam
- Modify the bikepath traveler rail connections
- Modify the crossbeam traveler rails
- Remove existing traveler rail on the Skyway transition section. Furnish and install new traveler rail.

The following revised contract plan and supplemental sheets detail all changes:

0663R2, 0951R2, 0952R2, 0956R3, 0956S1R1, 1009R2, 1010R2, 1011R3, 1012R2, 1013R2, 1014R2, 1015R2, 1016R2, 1017R2, 1018R3, 1019R2, 1020R2, 1021R2, 1022R2, 1023R2, 1024R2, 1025R2, 1026R2, 1027R3, 1028R3, 1029R3, 1030R2, 1031R2, 1032R2, 1033R2, 1034R2, 1035R3, 1036R3, 1037R3, 1037S1R1, 1037S2R1, 1037S3R1, 1037S4R1, 1037S5R1, 1037S6R1, 1037S7R1, 1037S8R1, 1037S9R1, 1120R3, 1121R3, 1122R3, 1122S1R1, 1123R3, 1124R3, 1125R3, 1126R3, 1127R3, 1128R3, 1129R3, 1130R3, 1131R3, 1132R3, 1133R3, 1133S1R2, 1153R3, 1154R3, 1155R3, 1156R2 and 1158R2 (of 1204).

This change order resolves Contractor Request for Information (RFI) Nos. 220R0, 630R0, 898R0/R1, 946R1, 1053R1, 1392R0, 1536R0, 1617R0, 1707R0 and 1835R0.

Estimate of Decrease in Contract Item at Contract Price:

The change in the traveler support rail from an "S" beam to a built-up beam and other changes as shown on the attached plan sheets result in a change in weight of Contract Item #101. This is a decrease in contract item at contract unit price.

Item No. 101: TRAVELER SUPPORT RAIL

-69,668 KG (-17.48%) @ \$7.00 / KG = (\$487,676.00) (-17.48%)

The quantity shown herein for Item(s) #101, TRAVELER SUPPORT RAIL, when combined with the quantities specified in the Engineer's Estimate, and as modified by any previous change orders, shall be the final quantity for which payment will be made.

Estimated total cost for Decrease in Contract Item(\$487,676.00)

Adjustment of Compensation at Lump Sum Price:

For the change in character of work for changing the rail from an "S" beam to a built-up beam, additional handling, installation, galvanization, brackets, bolts and other miscellaneous items, the Contractor agrees to accept a lump sum price of \$409,340.00 (ESTIMATED). This sum constitutes full compensation, including all markups, for this change.

For revising the crossbeam traveler rail and support brackets after the initial approval of shop drawings, the Contractor agrees to accept a lump sum of \$180,523.00 (ESTIMATED). This sum includes compensation for, but not limited to, markups, detailing costs, fabrication, and salvage value of material not incorporated into the work relative to this change.

Cost of Adjustment of Compensation at Lump Sum Price\$589,863.00 (ESTIMATED)

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 0 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

DRAFT

CCO 024S0 - CCO v11 20090930 to TBPOC.doc

Extra Work at Lump Sum Price:

To furnish traveler support rail along the Skyway transition section, the Contractor agrees to accept a lump sum price of \$147,813.00 (ESTIMATED). This sum constitutes full compensation, including all markups, for this change.

Cost of Extra Work at Lump Sum Price \$147,813.00 (ESTIMATED)

Extra Work at Force Account:

Remove existing traveler support rail on the Skyway transition section Install built-up traveler support rail. .

Labor, equipment and material authorized by the Engineer, as necessary, will be paid in accordance with the provisions of Section 4-1.03D, "Extra Work" of the Standard Specifications and Section 5-1.24, "Force Account Payment" of the Special Provisions.

Estimated Cost of Extra Work at Force Account.....\$500,000.00

Consideration of a time adjustment will be deferred until completion of the work specified herein. Determination of a commensurate time adjustment will be made in accordance with Section 10-1.13, "PROGRESS SCHEDULE (CRITICAL PATH METHOD)" and Section 10-1.14, "TIME-RELATED OVERHEAD" of the Special Provisions, as well as Section 8-1.07, "LIQUIDATED DAMAGES", of the Standard Specifications.

Total Estimated Change Order Cost\$750,000.00 (ESTIMATED)

Estimated Cost: Increase ☒ Decrease ☐ \$750,000.00

By reason of this order the time of completion will be adjusted as follows: Deferred

Submitted by

Signature

Resident Engineer

Rob Kobal for Gary Pursell, SupTE

Date

Approval Recommended by

Signature

Supervising Bridge Engineer

Richard Morrow, SupTE

Date

Engineer Approval by

Signature

Principal Transportation Engineer

Peter Siegenthaler, PrinTE

Date

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature

(Print name and title)

Date

CONTRACT CHANGE ORDER MEMORANDUM

DATE: 9/03/2009

Page 1 of 2

DC-CEM-4903 (OLD HC-39 REV. 6/93) CT# 7541-3544-0

TO Pete Siegenthaler, Principal TE			FILE 04-0120F4	
FROM Gary Pursell, STE / Richard Morrow, SBE			04-SF-80-13.2/13.9	
CCO NO. 24	SUPPLEMENT NO. 0	CATEGORY CODE CHPK	CONTINGENCY BALANCE (including this change) \$66,552,044.40	
\$750,000.00			HEADQUARTERS APPROVAL REQUIRED? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
SUPPLEMENTAL FUNDS PROVIDED \$			IS THIS REQUEST IN ACCORDANCE WITH DRAFT CCO 024s0 - CCO Memo v09 20090930 to TBPOC.doc <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
CCO DESCRIPTION: Traveler Rail Modifications				
Original Contract Time 2490 Day(s)	Time Adj.: This Change DEF Day(s)	Previously Approved Time Adjustments 150 Day(s)	(including this change) 6 %	Time CCO(s): (including this change) 6

THIS CHANGE ORDER PROVIDES FOR:

Substituting the maintenance traveler support rails, from the "S"-beam shape shown on the as-bid contract plans, to a welded built up beam shape. Sixty-four (64) contract plan sheets are revised to reflect this change and associated dimensional revisions on the SAS and the steel transition span constructed as part of the Skyway portion of the San Francisco-Oakland Bay Bridge (SFOBB).

This change was prepared and proposed for incorporation into the contract bid documents as part of Addendum No. 8 on 01-31-06 and was intended to supplement changes made by Addendum No. 6 which had already been incorporated into the bid documents. The Toll Bridge Project Oversight Committee (TBPOC) subsequently directed that Addendum No. 8 not be issued and that these (and other) changes instead be incorporated into the Contract by change order after Contract Award. This change order incorporates details proposed in the subsequent Design Change Request ("CR") 13 (copy on file).

Since the original ATP, the scope of required extra work has increased as follows:

1. Anti-skew devices and dynamic brake systems are required to be added to the maintenance travelers to mitigate operational and safety concerns, pursuant to lessons learned on other Toll Bridge contracts. These systems require a change from the "S"-rail to the built up section rail to provide flat flanges on both sides of the rail web, which is not provided by the sloping single flange of "S"-rail detailed in the as-bid plans. Originally, the change request proposed a "W" section rail to replace the "S" rail, however it was determined that such a section in the size needed was not available at the Contractor's fabrication site and it would be more cost effective to use a built up section.
2. A portion of the traveler rail extends to the Skyway portion of the SFOBB completed on contract 04-012024. Since the original change request, it was determined that the original railing used on the Skyway was not compatible and additional built-up section rail and brackets would have to be procured and the original railing would have to be removed.
3. Authorization to proceed on procurement and fabrication of the traveler rails was given to the Contractor due to the long fabrication lead-time. The Contractor submitted and the Department approved shop drawings for the rails. Subsequently it was discovered that the Department approved certain details in error, but fabrication had already begun. Some of the contract plan details included in this change order were modified to mitigate the rework costs for materials already fabricated. This change order includes compensation for the Department's share of the rework costs, which was not part of the original scope.

This change order is being issued to include the costs of the rail changes only. Supplement 1 will be issued to include changes to the remaining traveler components, including trolleys, brake systems, anti-skew devices, traveler structural changes, and paint and epoxy coatings.

The change in the traveler support rail from an "S" beam to a built-up beam and other changes as shown on the change order plan sheets result in a change in weight of Contract Item #101. For this work, there will be a decrease in contract item at contract unit price for a net decrease of (\$487,676.00), which will be returned to the contingency fund.

CONTRACT CHANGE ORDER MEMORANDUM

DATE: 9/03/2009

Page 2 of 2

DC-CEM-4903 (OLD HC-39 REV. 6/93) CT# 7541-3544-0

For changing the rail from an "S" beam to a built-up beam, additional handling, installation, galvanization, brackets, bolts and other miscellaneous items, the Contractor agrees to accept a lump sum price of \$409,340.00 (ESTIMATED). For revising the crossbeam traveler rail and support brackets after the initial approval of shop drawings, the Contractor agrees to accept a lump sum of \$180,523.00 (ESTIMATED). This results in a total adjustment of compensation lump sum price of \$589,863.00 (ESTIMATED), which can be financed from the contingency fund.

To furnish traveler support rail along the Skyway transition section, the Contractor agrees to accept an extra work at lump sum price of \$147,813.00 (ESTIMATED), which can be financed from the contingency fund.

The work to remove the existing, then install built-up traveler support rail along the Skyway transition section is not covered by contract item work. Therefore, payment for this work will be at Extra Work at Force Account for an estimated cost of \$500,000.00, which can be financed from the contingency fund.

Total cost of this change order is estimated at \$750,000.00. All work associated with this change order can be financed from the contingency fund. A detailed cost estimate is on file.

Consideration of a time adjustment will be deferred until completion of the work specified herein.

This change order received concurrences from Gary Pursell (Resident Engineer), Rick Morrow (Structure Rep.), Patrick Treacy (HQ Liason), Mike Forner for Peter Siegenthaler (Principal Engineer), Marwan Nader (Design of Record), Wenyi Long (OSCM Oversight), Lina Ellis (OSMI Oversight) and Ken Terpstra (Project Manager).

This change order received a Division of Construction Authority to Proceed on August 18, 2006 in the amount of \$261,000.00. Since the original ATP, the modifications to the plan sheets and a more detailed scope of work have arrived at the current estimate of \$750,000.00 for this change order. The Resident Engineer requests a revised Authority to Proceed on the current cost estimate for this change.

CONCURRED BY:		ESTIMATE OF COST	
CONSTRUCTION ENGINEER	DATE	THIS REQUEST	TOTAL TO DATE
Res. Eng. Gary Pursell, Sup. TE	8/11/06		
SR. BRIDGE ENGINEER	DATE	ITEMS	(\$487,676.00)
Rick Morrow, Sup. BE	8/02/06	FORCE ACCOUNT	\$500,000.00
FHWA REPRESENTATIVE	DATE	AGREED PRICE	\$0.00
		ADJUSTMENT	\$589,863.00
PROJECT MANAGER	DATE	TOTAL	\$750,000.00
Proj. Manager, Ken Terpstra	8/24/07		\$750,000.00
OTHER (SPECIFY)	DATE	FEDERAL PARTICIPATION	
HQ, Patrick Treacy	8/16/06	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE	
Design of Record, Marwan Nader	8/24/06	<input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING	
OSCM Oversight, Wenyi Long	7/01/09		
OSMI Oversight, Lina Ellis	7/01/09		
PCE, Mike Forner for Peter Siegenthaler, Prin TE	8/16/06	FEDERAL SEGREGATION (IF MORE THAN ONE FUNDING SOURCE OR P.I.P. TYPE)	
DISTRICT PRIOR APPROVAL BY	DATE	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS	
HQ (ISSUE & APPROVE) (TO PROCEED) BY	DATE	FEDERAL FUNDING SOURCE	PERCENT
Bob Molera (ATP)	8/18/06		
RESIDENT ENGINEER SIGNATURE	DATE		

CONTRACT CHANGE ORDER MEMORANDUM

DATE: 9/16/2009

Page 2 of 2

DC-CEM-4903 (OLD HC-39 REV. 6/93) CT# 7541-3544-0

CONCURRED BY:		ESTIMATE OF COST	
CONSTRUCTION ENGINEER	DATE	THIS REQUEST	TOTAL TO DATE
Res. Eng. Gary Pursell, Sup. TE	9/1/09		
SR. BRIDGE ENGINEER	DATE	ITEMS	\$0.00 (\$487,676.00)
Rick Morrow, Sup. BE	9/1/09	FORCE ACCOUNT	\$0.00 \$500,000.00
FHWA REPRESENTATIVE	DATE	AGREED PRICE	\$0.00 \$328,336.00
		ADJUSTMENT	\$2,500,000.00 \$1,659,340.00
PROJECT MANAGER	DATE	TOTAL	\$2,500,000.00 \$3,500,000.00
Proj. Manager, Ken Terpstra	9/16/09	FEDERAL PARTICIPATION	
OTHER (SPECIFY)	DATE	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING	
HQ, Patrick Treacy	8/16/09		
Design of Record, Marwan Nader	8/24/06		
OSCM Oversight, Wenyi Long	7/1/09		
OSMI Oversight, Lina Ellis	7/1/09		
	DATE	FEDERAL SEGREGATION (IF MORE THAN ONE FUNDING SOURCE OR P.I.P. TYPE)	
PCE, Peter Siegenthaler, Prin TE		<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS	
DISTRICT PRIOR APPROVAL BY	DATE	FEDERAL FUNDING SOURCE	PERCENT
HQ (ISSUE & APPROVE) (TO PROCEED) BY	DATE	_____	_____
HQ ATP (Bob Morales)	9/3/09	_____	_____
RESIDENT ENGINEER SIGNATURE	DATE	_____	_____
		_____	_____

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

To: **AMERICAN BRIDGE/FLUOR ENTERPRISES INC A JOINT VENTURE**

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract.

NOTE: This change order is not effective until approved by the Engineer.

Description of work to be done, estimate of quantities and prices to be paid. (Segregate items unless otherwise stated, rates for rental of equipment cover only such time as equipment is used. The percentage shown is the net accumulated increase or decrease from the original quantity.)

DRAFT

CCO 024S1 - CCO v05 20091002 to TBPOC.doc

Adjustment of Compensation at Lump Sum Price:

Revise Special Provisions Section 10-1.63 "Traveler Scaffolds", as shown on sheets 2 through 19 of this Change order. Modify maintenance traveler components as shown on sheets 20 through 112 of this change order. This change includes, but is not limited to, the following:

- Modify the traveler motors and trolleys
- Modify the traveler brake system
- Revise the testing procedures of the travelers including construction of a testing frame.
- Revise paint and other protective coatings specifications for various traveler components

The following revised contract plan and supplemental sheets detail all changes:

1007R2, 1008R2, 1011R4, 1018R4, 1028R4, 1036R4, 1038R2, 1040R1, 1046R1, 1047R2, 1048R1, 1049R1, 1050R1, 1051R1, 1052R1, 1053R1, 1054R1, 1055R2, 1057R1, 1065R2, 1067R1, 1074R1, 1076R1, 1077R2, 1079R1, 1080R1, 1081R1, 1084R1, 1085R1, 1086R1, 1087R1, 1090R3, 1091R1, 1092R1, 1093R1, 1094R1, 1096R1, 1099R2, 1100R2, 1101R2, 1103R1, 1104R1, 1105R2, 1106R1, 1107R2, 1109R2, 1110R2, 1111R3, 1112R3, 1113R2, 1114R2, 1115R2, 1116R3, 1117R2, 1118R2, 1119R2, 1119S1, 1134R2, 1134S1, 1134S2, 1135R2, 1135S1, 1135S2, 1145R2, 1146R2, 1147R2, 1148R2, 1149R1, 1150R2, 1151R2, 1152R1, 1152S1R1, 1157R2, 1159R2, 1159S1R1, 1160R2, 1161R2, 1161S1, 1161S2, 1161S3, 1161S4, 1161S5, 1163S1, 1163S2, 1163S3, 1163S4, 1163S5, 1163S6, 1163S7, 1163S8, 1163S9, 1163S10 and 1163S11 (of 1204).

This change order resolves Contractor Request for Information (RFI) Nos. 1050R0, 1112R0, 1598R0, 1599R0, and 1763R0.

For this work, the Contractor will receive a lump sum price of \$2,500,000.00. This sum constitutes full and complete compensation for furnishing all labor, material, tools and incidentals including all markups by reason of this Change.

(Estimated) Cost of Adjustment of Compensation at Lump Sum Price\$2,500,000.00 (ESTIMATED)

Estimated Cost: Increase ☒ Decrease ☐ **\$2,500,000.00 (EST)**

By reason of this order the time of completion will be adjusted as follows: **0 days**

Submitted by

Signature	Resident Engineer		Date
		Rob Kobal for Gary Pursell, SupTE	

Approval Recommended by

Signature	Supervising Bridge Engineer		Date
		Richard Morrow, SupTE	

Engineer Approval by

Signature	Principal Transportation Engineer		Date
		Peter Siegenthaler, PrinTE	

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature	(Print name and title)		Date

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:**Special Provisions Changes****10-1.63 TRAVELER SCAFFOLDS****GENERAL**

This work shall consist of furnishing, fabricating, testing and installing five under-deck traveler scaffolds in accordance with the details shown on the plans and the provisions of Section 55, "Steel Structures," Section 57, "Timber Structures," of the Standard Specifications, and these special provisions.

Attention is directed to "Welding" of these special provisions regarding welding of traveler scaffolds. Unless otherwise specified, welding of traveler scaffolds shall be in conformance with the requirements in AWS D1.1. The Contractor shall fully detail the travelers and all their components in accordance with the details shown on the plans and shall be responsible for verifying all dimensions and identifying any conflicts and bring these to the attention of the Engineer for resolution.

The Contractor shall confirm all dimensions, clearances and fit of the travelers to the permanent structure. Any conflicts shall be brought to the attention of the Engineer for resolution.

For the pneumatic systems, the Contractor shall carry out final design of the systems, generally following the schematics shown on the Contract Plans and respecting the operational and functional requirements as shown on the plans and as described herein.

This work shall include all final component design, where applicable, shop and field testing, and operator instruction for mechanical and pneumatic systems.

Each traveler shall be fully assembled in the shop before shipping to ensure proper fit of all parts and elements.

Unless otherwise noted, exposed steel shall be painted in accordance with the provisions of Section 59, "Painting," of the Standard Specification, and "Clean and Paint Structural Steel" of these Special Provisions. ~~Exposed moving parts of the drive machinery shall be painted OSHA safety red, orange, yellow or green conforming to the requirements of ANSI Z54.2.~~

Attention is directed to "Relations with United States Coast Guard" of these special provisions.

The Contractor shall demonstrate experience in the design and installation of pneumatic systems, and shall have completed a minimum of 3 successful bridge traveler or similar underhung crane projects within the last 5 years.

A qualified technical representative of the manufacturer(s) shall be present during installation and testing of the travelers.

The Contractor shall provide one experienced service technician for a minimum of 8 working days to instruct personnel appointed by the Engineer on how to properly operate and maintain the travelers.

Stainless steel capacity plates shall be furnished and installed indicating the permitted live loading using the wording noted on each individual traveler assembly drawing. Attachments shall be by means of corrosion-resistant fasteners. The plates shall be mounted where they are visible to the personnel on the traveler.

Each traveler shall be provided with four navigation lights meeting minimum Coast Guard navigation requirements for inland waterways for visibility and color. The navigation lights shall be watertight and be capable of being maintained from the traveler. The navigation lights shall be equipped with 60 meter long extension chords for attachment to 110 volt power to be supplied by others.

Any materials damaged during shipment or handling shall be repaired or replaced at the Contractor's expense.

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

The fourth paragraph in Section 55-2.02, "Structural Steel," and the fourth paragraph in Section 55-2.07, "Unidentified Stock Material," of the Standard Specifications shall not apply.

MATERIAL AND WORKMANSHIP

Bolts, nuts and washers, except where specified to be stainless steel, shall be galvanized in accordance with the provisions in Section 75-1.05, "Galvanizing," of the Standard Specifications.

Bolts, nuts and washers shall conform to the United States Standard Measures version of ASTM Designation: A325 unless noted otherwise on the plans.

Bolted connections shall conform to requirements in "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" (RCSC Specification) approved by the Research Council on Structural Connections of the Engineering Foundation.

Structural Steel

The specific requirements for grades of steel are shown on the plans.

Tubular or pipe connections

~~Dimensional details and workmanship for welded joints in tubular and pipe connections shall conform to the provisions in Part C, Structural Details; Part D, Special Provisions for Welding Tubular Joints; and Part E, Workmanship, in Section 10 of AWS D1.1.~~

Dimensional details and workmanship for welded joints in tubular and pipe connections shall conform to the provisions in Part A, "Common Requirements of Nontubular and Tubular Connections," and Part D, "Special Requirements for Tubular Connections," in Section 2 of AWS D1.1.

Decking Plywood

Plywood panels for decking shall conform to or exceed the requirements of U.S. Product Standard PS-1-9S for APA Structural 1 AB Marine Grade. Plywood shall be pressure treated. Plywood panels for decking shall be painted on all sides and edges with a commercial marine grade spar varnish. The varnish shall not contain linseed oil and shall be applied according to manufacturer's instructions. Fine silica sand shall be broadcast into the final coat of the upper surface of the decking at the rate of 1.5 kg per square meter of surface area.

Deck – Expanded Metal Grating

Where expanded metal grating is called on the plans, it shall be expanded metal structural grating of the weight size and style shown on the drawings.

The grating shall be trimmed at its edges with U edging or flat bar edging as shown on the drawings. The edging material is to be welded to the grating.

The grating assemblies are to be hot dip galvanized in accordance with the specifications.

The grating has been specified using the designations generally employed by Dramex Corporation and McNichols Company. Grating by other manufacturers of equal thickness and strength and slip resistance is acceptable.

Wooden Toeboards and Curbs

Wooden toeboards and curbs shall be pressure treated S4S Douglas Fir. Toeboards shall be painted on all sides with a commercial marine grade spar varnish. The varnish shall not contain linseed oil and shall be applied according to manufacturer's instructions.

Pressure Treatment of Wood

Pressure treatment shall conform to AWPA Standard C1 to a retention of at least 1.95 kg/m³.

Hardware for wooden toeboards and curbs

Hardware shall consist of all fasteners, carriage bolts with attached washer used to attach decking to the steel structure, lag screws or bolts through the toeboards, blind rivets, oil impregnated bronze bars, stainless steel socket set screws, or any

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

other hardware shown on the plans to attach the decking or toeboards to the traveler structure and shall conform to Section 75-1.02, "Miscellaneous Iron and Steel," of the Standard Specifications.

Rigging Hardware (Shackles etc.)

Rigging hardware shall be hot dip galvanized and shall meet the strength requirements shown on the specific plans.

The travelers have been detailed using the dimensions for Crosby material. Part numbers are given. Substitutions of equal strength are permitted. The Traveler supplier shall re-detail any parts affected by such substitutions.

Nylon

Nylon elements are to be made from Nylon 101, unfilled, Type 66 nylon, having the following physical characteristics:

Tensile Strength:	79 MPa
Modulus of Elasticity (Tensile):	2900 MPa
Hardness - Rockwell M:	85 MPa

Substitution of Nylatron GS Nylon, Type 66, MoS2 filled will be accepted.

The Contractor shall supply additional nylon parts for spares.

Chains

Chains shall be hot dip galvanized and shall have the minimum tensile strengths shown on the plans.

Blind Rivets Fasteners

~~Blind rivets~~ Fasteners for connecting plywood deck to the traveler ~~shall be stainless steel, 4.8 mm diameter and~~ shall be installed at 305 mm maximum on center along edges of plywood sheets and at 610 mm on center on intermediate supports unless otherwise specified. ~~Blind rivets~~ Fasteners are not to be installed into any tubular sections.

Fasteners shall be stainless steel self-tapping screws, ¼" (6.4mm) diameter. The type of stainless steel is to be suitable for marine exposure. Fabricator shall propose the type of stainless steel.

Teflon

Teflon (PTFE) for sliding bearings in the rail supports shall be ~~commercial~~ as follows:

PTFE shall be manufactured from pure virgin unfilled TFE resin conforming to ASTM D1457. PTFE shall be resistant to acids, alkalis and petroleum products; non-absorbing of water; stable from -360°F to +500°F; and non-flammable. It shall meet the following test requirements:

<u>Physical Property</u>	<u>ASTM Test Method</u>	<u>Requirement (min.)</u>
<u>Ultimate tensile strength</u>	<u>D1457</u>	<u>2800 psi</u>
<u>Ultimate elongation</u>	<u>D1457</u>	<u>200%</u>
<u>Specific Gravity</u>	<u>D792</u>	<u>2.12</u>

Adhesive. Adhesive used for bonding sheet PTFE shall be an epoxy material stable from -100°F to +250°F.

Non-destructive testing of the welds

Complete joint penetration (CJP) welds on all suspension components including links, suspension arms and lift plates, shall be 100 percent magnetic particle inspected and 100 percent radiographically or ultrasonically inspected. Partial joint penetration (PJP) and fillet welds on all suspension components including links, suspension arms and lift plates, shall be 100 percent magnetic particle inspected. Other CJP welds shall be 10% radiographically or ultrasonically inspected. Other PJP and fillet welds shall be 10% magnetic particle inspected.

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

Categories of welds not 100% tested shall be sampled at the specified rate by inspecting 100% of one weld out of each 10 similar welds within the production lot for a 10% rate. If any rejectable indications are found, an additional weld shall be 100% inspected by the same method. If any rejectable indications are found in the additional weld, all welds in the lot shall be inspected 100%. If any rejectable indications are found in the remainder, the sampling rate shall be doubled. All rejected welds shall be repaired, or replaced, and retested 100% by the same method.

The fabricator shall submit detailed magnetic particles, ultrasonic, and radiographic test procedures to the Engineer for review, and shall not proceed with the testing until the Engineer has approved the procedures.

Other welds are to be non-destructively tested at the frequency shown on the plans or described in other parts of these special provisions, whichever is the greater.

The acceptance criteria for UT shall be per AWS D1.1, Table 6.2 for non-tubular or CJP welds on square tubular connections 6mm or greater in thickness and section 6.13.3.1, and Class R for all other CJP tubular welds.

The acceptance criteria for RT shall be per AWS D1.1, section 6.12.3.

For all welds requiring 100% NDT, undercut shall be no more than 0.25mm deep. Undercut shall be no more than 1mm deep for all other welds.

For all welds requiring 100% NDT, the welds shall have no piping porosity. The frequency for piping porosity for other welds shall be no more than one in 100mm of weld length and the maximum diameter shall not exceed 2.5mm.

All other requirements of Table 6.1 apply.

Marine Grade Epoxy Finish

Marine grade epoxy finish shall conform to the ~~requirements of these special provisions. Surfaces to be coated with marine grade epoxy shall be blast cleaned in accordance with the requirements in Section 59-2.03 "Blast Cleaning," of the Standard Specifications.~~ Manufacturer's recommended standard marine grade epoxy finish as approved by the Engineer and these Special Provisions.

~~Marine grade epoxy shall be applied to two coats. The dry film thickness of the each coat shall not be less than 100 microns minimum nor more than 150 microns maximum.~~

The final coat color shall match Federal Standard No. 595B, No. 13432, or other contrasting safety color proposed by the Contractor and subject to the approval of the Engineer.

~~The target minimum total dry film thickness shall be 200 microns for smooth surfaces without major surface discontinuities. The target minimum total dry film thickness shall be 300 microns for mating surfaces.~~

Marine grade epoxy finish for material supplied by Ingersoll Rand shall be Ingersoll Rand paint specification 382-31341, "P1" option or equal, subject to approval of the Engineer.

Electroless Plating – Linear Actuators

Load screws and projecting shafts of the linear actuators shall be electroplated with an amorphous nanocrystalline composite of nickel tungsten and boron.

The coating shall be applied to prepared substrate in accordance with manufacturer's recommendations. Care shall be taken to remove all contaminants from the substrate prior to plating.

The coating shall be deposited to a minimum thickness of 0.001 inch. (0.025 mm).

The coating shall be demonstrated to be unaffected by ASTM Salt Spray Test B117 for a minimum period of 200 hours.

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

ERECTING, TESTING, AND WEIGHING OF THE COMPLETED TRAVELER**Erection of the Travelers**

The Contractor shall be responsible for devising and executing an erection method for the travelers including the provision of all required calculations, the supply of any necessary temporary material, and the development of appropriate method statements.

Unless otherwise approved by the Engineer, the requirements of the erection method shall not increase the weight of the traveler.

Weighing of Traveler

The Contractor shall carry out a detailed weight take off for all the travelers and shall submit this to the Engineer for his review prior to starting any fabrication.

Each traveler scaffold shall be weighed prior to installation on the bridge, with the method of weighing subject to approval by the Engineer. The weights for each traveler shall be taken and recorded at each trolley support; the total weight will be the sum of those individual weights.

The anticipated weights of the travelers are shown on the individual traveler assembly drawings. Should the actual weight measured deviate from these values by 10% or more, the actual weights shall be submitted to the Engineer for his review and determination of what action, if any, is required.

Pre-test requirements

Before starting or operating systems, the Contractor shall flush and clean equipment and check for proper installation, lubrication and servicing.

General Testing Requirements

~~The Contractor shall test and start up mechanical systems upon installation of the travelers on the bridge as hereinafter specified. The Contractor shall follow the equipment manufacturer's break-in procedure before full load testing for all equipment. Final adjustments and balancing of the systems shall be performed so they will operate as specified. The Contractor shall replace or revise any equipment, systems or work found deficient during tests. Particular care shall be used in lubricating bearings to avoid damage by overfilling with lubricant and blowing out seals.~~

~~The Contractor shall repair, or replace with new equipment, any equipment damaged during shipment, after delivery, during installation and during testing.~~

~~The Contractor shall perform tests after installing the hoses to insure the lines are airtight. The test shall be conducted for a period of one hour at the design pressure. Defective work shall be repaired at the Contractor's expense.~~

Shop Testing

One of the completed SAS travelers and one of the completed E2/E3 travelers shall be tested in the shop under maximum design loading conditions in the presence of the Engineer as described below. The length of the testing runway shall be sufficient to achieve testing requirements set forth in this specification. The slope of the testing runway shall be equal to the maximum slope that the travelers will be required to negotiate on the bridge. The test runway need not incorporate curved rail. The bikepath traveler does not need to be shop tested.

Field Tests

~~The Engineer shall be notified at least 3 days in advance of starting these tests.~~

Upon completion of mechanical work and pre-test requirements, or at such time prior to completion as determined by the Engineer, the Contractor shall operate and test the travelers and their installed mechanical systems as described below. Travelers which will cross expansion joints in service shall cross at least one expansion joint in each direction during this test.

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

Each of the completed travelers shall be field tested on the bridge ~~as follows~~.

The Contractor shall furnish, install and remove all apparatus necessary for performing the tests.

Traveler Testing Requirements (Shop and Field Testing)

- A. All traveler components, structural, mechanical and pneumatic ~~components~~ shall be completely installed and functional prior to commencement of these tests. All components shall be monitored during the testing to ~~assure~~ ensure that no excessive heating per the manufacturer's guidelines occurs, and that no binding occurs.
- B. ~~Tests-Testing~~ shall be ~~conducted~~ performed with the traveler fully loaded ~~per~~ to the maximum design live loading stated in the plans.
- C. All tests shall be ~~conducted~~ performed in both the upgrade and down grade directions.
- D. ~~For the~~ The SAS and E2/E3 travelers, ~~the traveler~~ shall be intentionally skewed up to the design value of 10% (5.7 ~~degrees~~ Degrees) in ~~either~~ both directions. As the ~~carriage scaffold~~ is skewed the anti-skew system shall be tested for response to minor and major skew conditions. As the scaffold is skewed, a careful check shall be made for structural or other interferences, and corrections made as ~~necessary~~ required.
- E. The traveler speed shall be tested corresponding to design criteria set forth in this specification and the exhaust choke valves adjusted to limit the maximum speed going upgrade to 20 fpm (6.1 m/min).
- F. ~~All conditions that prevent the proper functioning of the travelers and appurtenances shall be corrected at the Contractor's expense, as approved by the Engineer.~~ Travelers required to cross an expansion joint in service shall cross at least one expansion joint in each direction during the field test.
- G. All testing shall be performed in the presence of the Engineer.
- H. The Engineer shall be notified at least 5 working days in advance of starting shop test and 3 working days in advance of starting the field test.
- I. Every trolley train shall be shop tested to show that it can negotiate the required rail curvature without binding or jamming. The test radius shall be 5.0 meters for the bikepath traveler trolley train and 10.0 meters for the SAS and E2/E3 trolley trains.
- J. Shop testing shall prove the ability of the "dynamic" brakes to stop the traveler safely from a speed of 30 fpm (9.1 m/min) when fully loaded and moving downgrade.

~~The Contractor shall furnish, install and remove all apparatus necessary for performing the tests.~~

The Contractor shall test and start up mechanical systems upon installation of the travelers. The Contractor shall follow the equipment manufacturers' break-in procedures before full load testing for all equipment. Final adjustments and balancing of the systems shall be performed so they will operate as specified. The Contractor shall replace or revise any equipment, systems or work found deficient during tests. Particular care shall be used in lubricating bearings to avoid damage by overfilling with lubricant and blowing out seals.

The Contractor shall repair, or replace with new equipment, any equipment damaged during storage, shipment, after delivery, during installation and during testing.

The Contractor shall perform tests after installing the hoses to insure the lines are airtight. The test shall be conducted for a period of one hour at the design pressure. Defective work shall be repaired at the Contractor's expense. The Contractor shall be responsible to ensure that the pneumatic systems perform in accordance with the operational and functional requirements.

TRAVELER SCAFFOLD MECHANICAL

General

Traveler scaffold mechanical consists of furnishing, fabricating, and installing the traveler scaffold mechanical equipment, including the on board air lines, in accordance with the details shown on the plans, the provisions in Section 55, "Steel Structures," of the Standard Specifications and these Special Provisions.

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

The fourth paragraph in Section 55-2.07, "Unidentified Stock Material," of the Standard Specifications shall not apply. Mechanical work shall include furnishing all detailed design, labor, materials, equipment and services required to provide operating travelers.

Skew Control Requirements – SAS and E2/E3 Travelers

Each traveler shall be equipped with a positive acting anti-skewing system consisting, in part, of motor controls and, in part, of "dynamic" brakes operated by air relief valves or similar devices. The anti-skewing system shall be designed to limit the maximum skew that can develop when the traveler is traveling at 20 feet per minute (6.1 m/min) to a 5.7° (10%) skew.

The traveler shall be designed with a "dynamic" brake system capable of stopping the traveler from a speed of 30 feet per minute. The "dynamic" brakes shall be spring actuated and air release. The motorized trolleys shall not be used as a component of the dynamic braking system.

Skew indicators shall be provided at each operator station to show the traveler operator the degree of skew of the travelers with respect to the traveler rails. Two skew indicators shall be provided at each station, one for each direction of travel, allowing the operator to have a skew indicator in his/her field of view while operating the traveler from either side of the operator station.

The operator's station shall be designed so that the operator is able to face the direction of travel and operate the traveler safely in both directions. Two foot-operated deadmans shall be provided at each operator's station so that the traveler can be operated from either side of the operator station. The operator shall be required to keep the foot valve depressed in order to operate the throttle valves.

The anti-skew system shall actuate the "dynamic brakes" when the traveler approaches its critical skew limit of 5.7° and shall bring the traveler to a stop from 20 fpm before the skew exceeds 5.7°.

The skew indicators shall be delineated with different colors as shown on the plans to indicate the three ranges of operation. The colors are as follows.

Green indicates normal operation. – zero to 2.8° skew.

Yellow indicates the traveler is skewed beyond the normal operating range of +/- 2.8°. Under this condition the motors on the side causing the skew are to be shut down, allowing the motors on the other side to catch up. The operator is shall be able to over-ride the motor shut down when it is necessary to operate the traveler at greater than 2.8° skew. This is to be done by using a hand operated valve that is held closed by a spring and must be depressed by the operator to be opened.

Red indicates the traveler has reached or exceeded its critical skew limit. All brakes shall be applied as the limit is approached to prevent the development of skew exceeding 5.7° before the traveler is halted. The operator shall then be able to manually release the brakes in order to bring the traveler back to a reduced skew. A brake release shall be provided. It shall be a hand operated valve that is held closed by a spring and must be depressed by the operator to be opened.

Equipment

All equipment shall be manufactured from material that is resistant to deterioration or corrosion in a marine environment or shall have a protective coating to provide such resistance. Seals and gasket material shall be suitable for air or non-corrosive gases and shall be resistant to deterioration in a marine environment and to hydrocarbons (air-entrained petroleum or vehicle exhaust).

Miscellaneous bolts, nuts, washers, fasteners, and springs otherwise unspecified shall be ~~18-8~~ type 304 stainless steel.

All equipment shall be capable of operating in a temperature range of –6° C to 95° C and shall be rated for operation in a pressure range 170 kPa gauge to 1,000 kPa gauge. (25 to 145 psig) unless otherwise noted. Operating pressure available

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

on the bridge may vary from 490 kPa to 620 kPa. For the linear actuator air motors, pressure relief valves are to be supplied to prevent the application to the motors of pressures in excess of 690 kPa (100 psig) under any circumstances.

Traveler supplier is to verify that all components of the mechanical and pneumatic systems are compatible with each other and with the structural components.

Lubrication points shall be furnished with pressure type lubrication fittings. All bearings requiring greasing shall be equipped with grease fittings. Grease fittings shall all be one size and shall be located for easy access.

Codes

All work, including equipment, material and installation, shall conform to California Administrative Code, Title 8, Division of Industrial Safety.

The Contractor shall coordinate the supply of the quick disconnect fittings that are mounted on the bridge with those on the travelers.

Sole Source Supplier

The piston motor driven trolleys, the passive trolleys, and the brake trolleys shall be obtained from the following manufacturer:

VENDOR ADDRESS AND PHONE NUMBER
ELECT AIR 4385 EAST LOWELL STREET 11897 CABERNET DRIVE, SUITE C ONTARIO, CA 91761-2228 FONTANA, CA 92337 TEL: 909-390-0770 951-685-1675 FAX: 800-390-0776

The unit prices quoted by the supplier for the trolley items are as follows:

ATET-MR3/05065B	\$16,101.98 each
BrkTrolley/03003B	\$5,882.87 each
BTP-MR3-6/04028B	\$3,772.93 each

The prices quoted are effective for all orders placed on or before 6/30/2006, provided delivery is accepted within 112 days after the order is placed. The FOB location is Seattle, Washington. The above prices include freight, insurance, technical advice, inspection by a qualified representative of the manufacturer during installation and a final inspection of the installed trolleys, but do not include taxes.

The total price will be increased 5% per year for each year thereafter through 2011, provided delivery is accepted within 112 days after the order is placed.

The Ingersoll Rand Component Identification Codes listed in the Plans and Specifications describe the general category of components. The Specific and Final Part Identification Codes will be established by Ingersoll Rand, in consultation with the Engineer so as to reflect the particular variances from standard components for this project. The Contractor shall submit manufacturer's details of the components for the Engineer's approval before finalizing the purchase order for each component.

Products

For the purposes of completing the detailing of the individual components of the travelers selection of specific mechanical equipment has been made. The products ~~is~~ and their component(s) ~~are~~ is named on the plans or in this specification.

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

The specific items named are suitable and acceptable for use on these travelers. The traveler supplier may substitute other items in place of the listed equipment provided that the strength and performance of the proposed substitution is at least equal to the performance of the named item and that the durability of the substitution is at least equal to that of the named item.

Any such proposed substitutions shall be submitted to the Engineer with sufficient documentation to support their acceptance. The Engineer will determine the acceptability of the proposed substitution.

Should the substitution be found acceptable, the traveler supplier shall re-detail, at his expense, any components that require alteration as a result of this substitution.

- A. Reversible Radial Piston Motor Driven Trolley (~~motor-trolley~~) - Piston motor driven trolley shall be Ingersoll-Rand series ATET –MR3/~~605065B~~ air driven trolley or approved equivalent and shall be installed in accordance with the details shown on the plans. The drive wheels shall be connected to the air motor by means of a geared speed reducing power train.

Piston motor driven trolleys shall be rated by the manufacturer ~~to have a minimum Factor of Safety~~ as follows:

Rated Load ~~—6000 kg @ 5:1 Factor of Safety~~ for “Man Rider” application – 3000kg with Minimum 10:1 Safety Factor.

The manufacturer shall certify that the trolleys are structurally capable of carrying ~~a the~~ Rated Load of ~~6000~~3000 kg with a Factor of Safety of at least ~~5.0~~ 10.0. ~~Note that the actual service loads on the trolleys are substantially less than the rated loads noted above.~~

The drive wheels shall be cast iron or ductile iron or surface hardened~~mechanical~~ steel and shall have a ~~compound~~ tread shape suitable for operation on the lower flange of the 127 mm wide flat flange rail (bike path wheels) ~~and/or~~ the 181 mm wide ~~taper flat~~ flange rail (other wheels) and shall provide adequate clearance from the splice plates and jumper assemblies.

The units shall have ~~the “a~~ a marine grade epoxy finish. ~~in accordance with these Special Provisions.~~

The air motor shall be 4 cylinder reversible, radial piston-type ~~having a remote control valve chest.~~ Crank pin and connecting rods shall be drop forged construction. Bearings and shafting shall have dust shields.

Starting, reversing and stopping of the traveler scaffold shall be accomplished by means of remotely controlled throttle installed as shown on the plans and specified herein.

Wheel treads shall be hardened. Wheel tread hardness shall be ~~275~~ a minimum of 269 BHN.

- ~~B. **Passive trolley** — Passive trolley shall be Ingersoll Rand — Model BTP MR 316 or approved equivalent. Trolleys shall have cast iron, ductile iron or surface hardened steel wheels hardened to BHN 269 with compound treads for operation on flat and tapered flanges and shall be equipped with thrust ball or roller bearings in hardened races and with dust seals. Trolley wheels shall be suitable for operation on the lower flange of the traveler rails. Trolley wheels shall have a Rated Load of 1500 kg each with a 5:1 minimum Factor of Safety. The assembled trolley shall have a Rated Load of 6000 kg with a minimum factor of safety of 5:1. Note that the actual applied load is substantially less than the Rated Load. Trolley shall have a marine grade epoxy finish.~~

- ~~C. **Brake trolleys** — Brake trolleys shall be as shown on the plans. Brake trolleys shall have cast iron, ductile iron or surface hardened steel wheels with compound treads and shall be equipped with thrust ball or roller bearings in hardened races and with dust seals. Trolley wheels shall be suitable for operation on the lower flange of the traveler rails. Trolley wheels shall have a Rated Load of 1500 kg each with a minimum Factor of Safety of 5:1. Brake trolley shall have a marine grade epoxy finish.~~

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

~~D. **Air Actuated Safety parking brake** – The brakes shall be spring-actuated to set the brake full stop. Brake release shall be by air pressure. Each brake shoe shall be operated by a brake chamber.~~

~~The position of the fabric-lined brake shoe shall be controlled by means of an operating cylinder having a bore of approximately 152 mm diameter and a single-acting spring loaded piston. Stroke shall be 50 mm minimum.~~

~~The brake shall be rated at 590 kg clamping force at 58 mm and 840 kg at 0 mm stroke. The brake shall set at 25 mm stroke. Brakes shall release to 0 mm stroke under 480 kPa air pressure.~~

~~Brake shoe shall provide a minimum holding capacity of 2.7 kN on galvanized rail with a minimum factor of safety of 1.33.~~

~~Under a condition of zero gauge air pressure, the safety parking brake shall be in the "on" position preventing movement of the travelers.~~

~~E. **Foot-operated Poppet Valve.** – The foot-operated poppet valve shall be a 3-way foot-operated, spring return, normally closed poppet valve. The valve shall have a bronze body and NPT National Pipe Thread ports and shall be suitable for the anticipated air flow at 860 kPa gauge minimum working pressure. Downstream side shall be at atmosphere when "off."~~

~~F. **Throttle control valve** – The throttle remote control valve shall be a lever-operated disc or rotor type. Valve shall have mechanite body and National Pipe Thread ports and, when supplied with 690 kPa gauge inlet air, the valve shall be rated for the anticipated air flow capacity. Valve shall be suitable for at least 860 kPa working pressure.~~

~~G. **Compressed air piping** – Piping for air lines on the traveler shall be rigid pipe of the nominal size Imperial shown on the plans with flexible hose for no more than 750 mm connecting to the brakes and motors unless longer lengths of flexible hose are shown on the drawings.~~

~~H. **Ball valve** – Ball valves shall be Class 400 bronze body with bronze trim and threaded ends.~~

~~I. **Whistle** – Whistles shall be 38 mm bell diameter and produce 100 dB tone minimum at 690 kPa supplied air pressure.~~

~~J. **Whistle valve** – Whistle valve shall be a poppet valve, 2-way lever-operated, normally closed type. The valve shall have brass steel body and NPT National Pipe Thread ports and, when supplied with 690 kPa gauge inlet air, the valve shall be rated for a flow capacity of 42 L/s, and shall be suitable for 1,000 kPa gauge minimum working pressure.~~

~~K. **Flexible Hose** – Flexible hose shall have a rubber core, 2 synthetic body plies and a weather and abrasion resistant cover. Hose shall have a minimum rated pressure of 2,000 kPa. All clamps, couplings, and other hardware used in conjunction with the hose shall be made of stainless steel and shall be rated for 2,000 kPa.~~

~~L. **Quick coupling** – Quick coupling shall be claw type, bronze body, with neoprene gasket. NPS threaded ends for pipe, and barb end for hose. This shall not apply to the quick disconnects specified in item V below.~~

~~M. **Pressure regulator assembly** – Pressure regulator assembly shall be combination type, with 50 micron filter element rating, automatic drain and plastic bowl, 0 kPa to 1,000 kPa pressure regulator with pressure gauge, and 500 ml lubricator. The filter and lubricator elements shall be similar in size and appearance and shall be supplied by the same manufacturer. A manual drain shall be supplied at the low point of the oil storage bowl. Port sizes for both elements shall be the line size.~~

~~N. **Pressure gages** – Pressure gages shall be included and shall be 50 mm dial type, Grade A, and National Pipe Thread back ported. Pressure gages shall have a range of 0 kPa to 1,350 kPa.~~

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

~~O. **Double check valve** – Double check valve shall be bronze body, NPT 1/2 inlets and NPT 1/2 outlet with a stainless steel ball. The valve shall be rated for at least 860 kPa operating pressure and shall be of the type used for truck braking systems.~~

~~The purpose of this valve is to supply pressure to the brake cylinders to release the brake when the foot operated poppet valve has been actuated and to vent the brake cylinders to atmosphere once the foot operated poppet valve is released.~~

~~P. **Compressed air piping** – Piping for on board air lines shall be Schedule 40 galvanized steel pipe conforming to ASTM Designation: A 53, Type S, Grade B. Fittings shall be extra heavy type, galvanized steel or malleable iron.~~

~~Q. **Dump (Quick Exhaust) Valve** – Dump valves are to be provided for each braking system to ensure quick operation of the brakes. Dump valve is to be pilot operated and spring loaded and suitable for quick exhausting of the brake cylinders.~~

B. **Passive trolley** – Passive trolley shall be Ingersoll Rand – Model BTP-MR3-6/04028B or approved equivalent. Trolleys shall have cast iron, ductile iron or surface hardened steel wheels hardened to a minimum of BHN 269 with a tread suitable for operation on flat flanges and shall be equipped with thrust ball or roller bearings in hardened races and with dust seals. Trolley wheels shall have a Rated Load capacity that is compatible with the rated load for the trolley. The assembled trolley shall have a Rated Load for “Man Rider” application of 3000 kg with a minimum factor of safety of 10.1.

Trolley shall have a marine grade epoxy finish.

C. **Brake trolleys** - Brake trolleys shall be Ingersoll Rand Brake Trolley Model BrkTrolley/03003B incorporating a safety parking brake as described below. Brake trolleys shall have cast iron, ductile iron or surface hardened steel wheels with a tread suitable for operation on the lower flange of the traveler rail. The wheels shall be equipped with thrust ball or roller bearings in hardened races and with dust seals. Trolley wheels shall have a capacity that is compatible with the rated load for the trolley. The assembled trolley shall be certified by the manufacturer to have a Rated Load for “Man Rider” application of 3000 kg with a minimum factor of safety of 10:1. Brake trolley shall have a marine grade epoxy finish.

D. **“Dynamic brakes”** – The travelers have been detailed using a Twiflex model MX25-2 air operated brake. This brake is known to be suitable and acceptable for this application. Should the fabricator wish to propose the use of other brakes that are equivalent both in function and durability, it shall be his responsibility to re-detail all elements affected by such a substitution. The brakes shall be suitable for operation on the lower flange of the traveler rail and shall provide adequate clearance from the splice plates, rail stops, and jumper assemblies. The brake caliper must be spring applied and retracted by pneumatic pressure. The caliper shall produce a minimum of 8.9 kN (2000 lbf) of force when spring applied. The caliper shall be capable of being fully retracted at a minimum applied pressure of 482.6 kPa (70 psi). Before installation the brake calipers shall be disassembled and all mating surfaces and shafts lubricated with a Molybdenum disulfide Lithium based multi-purpose grease. The dynamic brake units shall be finished as recommended by the manufacturer and approved by the Engineer.

E. **Air Actuated Safety parking brake** - The brakes shall be spring-actuated to set the brake full stop. Brake release shall be by air pressure. Each brake shoe shall be operated by a brake chamber.

Each brake shall provide a minimum holding capacity of 2.7 kN on galvanized rail with a minimum factor of safety of 1.33.

Under a condition of zero gauge air pressure, the safety parking brake shall be in the "on" position preventing movement of the travelers.

F. **Main System Poppet Valve** - The main system poppet valve shall be a 3-way pilot operated, spring return, normally closed poppet valve. The valve shall have a brass or stainless steel body and NPT (National Pipe Thread)

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

ports and shall be suitable for the anticipated air flow at 860 kPa gauge minimum working pressure. Downstream side shall be at atmosphere when "off." This valve shall be controlled by a foot-operated pilot valve.

- G. **Throttle control valve** – The throttle control valve shall be proportional, shall be manually directly controlled and shall be suitable for the full airflow. The valve shall be incorporate porting to control the release of the brakes. The valve shall also incorporate an emergency stop button. Ingersoll Rand control valves from the "Force Five" series winches are known to be suitable for this application. Other valves of equal performance and durability are acceptable. The valve shall have a brass or stainless steel body or as approved by the Engineer.
- H. **Compressed air piping** - Piping for air lines on the traveler shall be black metal rigid pipe of the nominal size Imperial shown on the plans with flexible hose for no more than 750 mm connecting to the brakes and motors unless longer lengths of flexible hose are shown on the drawings.
- I. **Ball valve** - Ball valves shall be Class 400 brass or stainless steel body with brass trim and threaded ends.
- J. **Whistle** - Whistles shall be 38 mm bell diameter and produce 100 dB tone minimum at 690 kPa supplied air pressure.
- K. **Whistle valve** - Whistle valve shall be a poppet valve, 2-way lever operated, normally closed type. The valve shall have brass steel body and NPT National Pipe Thread ports and, when supplied with 690 kPa gauge inlet air, the valve shall be rated for a flow capacity of 42 L/s, and shall be suitable for 1,000 kPa gauge minimum working pressure.
- L. **Flexible Hose** – Flexible hose shall have a rubber core, 2 synthetic body plies and a weather and abrasion resistant cove. Hose shall have a minimum rated pressure of 2,000 kPa. All clamps, couplings, and other hardware used in conjunction with the hose shall be made of stainless steel and shall be rated for 2,000 kPa.
- M. **Quick coupling** - Quick coupling shall be claw type, brass or stainless steel body, with neoprene gasket. NPS threaded ends for pipe, and barb end for hose. This shall not apply to the quick disconnects specified in item V below.
- N. **Pressure regulator, Lubricator, and Filter.** The pressure regulator, lubricator and the filter shall be separate units. The pressure regulator with pressure gauge shall be capable of regulating pressure from 0 kPa to 1000 kPa. The lubricator shall have a nominal reservoir size of 1 liter (1 quart US) and have a screw-on bowl with a manual drain at the low point of the storage bowl. The filter shall have a 40 micron filter element rating with an automatic drain. All units shall have aluminum or die cast bowls. All units (regulator, lubricator, and filter) shall be supplied by the same manufacture. Port sizes for all elements shall be the line size.
- O. **Pressure gages** - Pressure gages shall be included and shall be 50 mm dial type, Grade A, and National Pipe Thread back ported. Pressure gages shall have a range of 0 kPa to 1,350 kPa.
- P. **Double check valve** - Double check valve shall be brass or stainless steel body, with a stainless steel ball. The valve shall be rated for at least 860 kPa operating pressure.
- The purpose of this valve is to supply pressure to the brake cylinders to release the brake when the foot operated poppet valve has been actuated and to vent the brake cylinders to atmosphere once the foot operated poppet valve is released.
- Q. **Compressed air piping** – Piping for on board air lines shall be Schedule 40 galvanized steel pipe conforming to ASTM Designation: A 53, Type S, Grade B. Fittings shall be extra heavy type, galvanized steel or malleable iron.
- R. **Dump (Quick Exhaust) Valve** - Dump valves are to be provided in the braking system to ensure quick operation of the brakes and also in the pilot circuits to ensure rapid dissipation of the pilot signals. Dump valves are to be pilot

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

operated and spring loaded and suitable for quick exhausting. The valve shall be brass or stainless steel body or as approved by the Engineer.

S. **Linear Actuators** – Linear actuators shall be supplied by one of the following manufacturers, or equal:

VENDOR ADDRESS AND PHONE NUMBER
TEMPLETON KENLY SIMPLEX (A Division of Templeton Kenly) 2525 Gardner Road Broadview, IL 60155 Phone: 800-275-5225 Fax: 708-865-0894
NOOK INDUSTRIES, INC. 4950 East 49 th Street Cleveland, Ohio 44125-1016 Phone: 216-271-7900 Fax: 216-271-7020
JOYCE-DAYTON CORP. P.O. Box 1630 Dayton, Ohio 45401 Phone: 937-294-6261 Fax: 937-297-7173

For the purposes of completing the detailing of all associated components, a specific selection has been made for linear actuators. The units selected are Templeton Kenly, Unilift, M Series screw actuators. The specific unit descriptions are shown on the plans. Substitutions of equivalent performance may be proposed for review by the Engineer. Should such substitution be accepted, the traveler supplier shall re-detail, at his expense any components affected by the substitutions. Ball screw actuators will not be accepted as a substitution due to potential backwards movement under load. The actuator load screws and exposed shafts shall be steel that is electroplated as specified in these special provisions, that will withstand severe environmental exposure including salt-laden air. The actuator screws for the M50 units shall be made from mechanical tubing to reduce weight. Each actuator shall be supplied with a protective rubber boot as shown on the plans. Actuators shall be marine grade epoxy coated.

T. **Actuator Drive Air Motors** - Actuator drive air motors shall be supplied by one of the following manufacturers, or equal

VENDOR ADDRESS AND PHONE NUMBER
Ingersoll-Rand Ingersoll-Rand Productivity Solutions Group 510 Hester Drive Whitehouse TN 37188 Phone: 800-866-5457 Fax: 615-672-7678
CooperTools 6500 West Sam Houston Parkway North, Suite 200

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

~~Houston, TX 77041~~~~Phone: 713-849-2364~~~~Fax: 713-849-2647~~~~PSI Automation~~~~2113 Seabrook Circle~~~~Seabrook, TX 77586~~~~Phone: 800-392-3602~~~~Fax: 281-280-8795~~VENDOR ADDRESS AND PHONE NUMBERINGERSOLL-RANDIngersoll-Rand Tool and Hoist Division11909 Telegraph RoadSanta Fe Springs, CA 90670Phone: 562-777-0808Fax: 562-777-0818COOPERTOOLS2000 S. Santa Cruz StreetAnaheim, CA 92805-6816Phone: 714-712-5800Fax: 714-712-5801PSI AUTOMATIONP.O. Box 34486Houston, TX 77234-4486Phone: 800-392-3602Fax: 281-280-8795

For the purposes of completing the detailing of all associated components, a specific selection has been made for the drive motors for the linear actuators. The units selected are Ingersoll Rand units. The specific model numbers are as shown on the plans.

Substitution of units with equivalent performance and durability may be proposed for review by the Engineer.

Should such substitutions be accepted, the traveler supplier shall re-detail, at his expense, all affected components.

Substitute air motors shall have starting, running and stall torque values within 10% of the values for the selected motors within the pressure range of 490 to 690 kPa.

The maximum force in the actuators at stall out of the motors must not exceed the current value by more the 10%.

The motor starting torque available at 490 kPa air pressure shall be sufficient to extend the proposed actuators under the following axial compressive loads:

Type	Axial Compressive Load
ACT 03, 04, 05, and 06 (M50)	40.0 kN, min

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

ACT 01 and 02 (M30)	31.5 kN, min
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The ultimate column buckling strength of the proposed actuators shall meet or exceed the following values:

Unit Type	Unsupported Length, min	Ultimate Column Buckling Load
M30	3581 mm	176 kN
M50	4583 mm	170 kN

Ultimate column buckling load = (1.5 x dead load) + (10 x live load)

Drive motors shall be marine grade epoxy coated.

U. Couplings and Shafts - Couplings and shafts shall be of the type shown on the plans and shall be rated for the torque values shown on the plans. The finish shall be as recommended by the manufacturer and approved by the Engineer.

V. Quick Disconnect Couplings - The description applies only to the quick disconnect couplings that are used on the E2/E3 travelers to change suspension systems at Hinge A.

The purpose of these couplings is to allow disconnection of the air supply to either trolley train as the suspension is changed from SAS rails to Skyway Rails.

The requirements are shown schematically on the plans.

The manufacturer is to propose a style and model of disconnect coupling that is suitable for this use, that can be disconnected and re-connected without the use of tools and that will close off the disconnected hose ends such that full operating air pressure can be applied against the disconnected free ends.

W. Limit Switch Valves - The valves controlling the response to excessive skew (limit switch valves) shall be mechanically activated spool valves, 3/2 function, 1/4" NPT ports with roller lever activation and spring return, Norgren 03-0611-22 or equivalent.

OPERATION

Each traveler shall be equipped with ~~two~~ one control stations mounted in the position shown on the plans. The control stations shall ~~be~~ incorporate a watertight and corrosion resistant enclosure for the controls.

Manually operated proportional control throttle valves shall be provided, one to control each side of the traveler. The throttle controls for the traveler trolleys and the linear actuator motors shall be equipped with deadman controls, which interrupts ~~for controls~~ the air flow when the operator becomes incapacitated or cannot continue to operate the controls.

The main air supply to all functions shall be controlled by a normally closed main system valve actuated by a deadman control. This deadman control shall be ~~knee or~~ foot operated. ~~Manually operated proportional control throttle valves shall be provided, one to control each side of the traveler.~~

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

When the distribution piping is connected to the bridge air system nominal (nominal 620 kPa gauge, 490 kPa gauge minimum), a single operator shall be able to operate the traveler by depressing the foot valve and moving the two hand throttles from the neutral position. The following shall be the sequence of operation for the traveler trolley motors:

- A. The foot-operated ~~poppet~~ pilot valve is depressed activating the main system valve.
- B. Air is transmitted to ~~release the brake and~~ provide air to the throttle valves.
- C. The hand controls of the throttle valves are moved to the desired port alignment to allow air flow to the motors and to release the brakes. Flow to the motors shall be proportional to hand control movement.
- D. When the throttle and control handle is returned to the neutral position air supply to the motors is cut off and the motors stop. Air to the brake release is also interrupted and the quick dump valves will exhaust the brake air thereby setting the brakes. The control handle shall return automatically to the neutral position when released.
- E. When the foot valve is released, all ~~air to the brake and throttle valve~~ is cut off, causing the spring-loaded brakes to set and the throttle valve to become inoperative. The foot valve is a dead man safety control, ~~which causes the brake to set whenever the pedal is released~~.

SUBMITTALS**Working Drawings**

The Contractor shall submit working drawings to the Engineer for approval in accordance with the provisions in "Working Drawings," of these special provisions.

The Contractor shall allow 50 days for the review by the Engineer after complete drawings and all supplemental data, including calculations and calculated weights, are submitted. Fabrication shall not commence until the Engineer's approval is received.

The working drawings shall contain all information required for the quality control and proper construction of maintenance travelers.

Working drawings shall include the following:

- A. Complete details, material specifications and schedules for fabrication and shop assemblies. Complete details shall include, but not be limited to, all components, materials, and methods to support, propel, and brake the travelers.
- B. Details showing the fit and assembly of all steel and other elements required to complete the work.
- C. Complete piping and control diagrams showing interconnection of all pneumatic apparatus and equipment.

Calculations for all mechanical components and/or systems designed or detailed by the fabricator, and also the associated working drawings, shall be stamped and signed by an engineer who is registered as a Mechanical Engineer in the State of California.

The Contractor shall verify space availability, fit-up and compatibility for any and all component equipment and apparatus to be installed.

The Contractor shall confirm all dimensionings, clearances and fit of the travelers to the permanent structure. Any conflicts shall be brought to the attention of the Engineer for resolution.

Product data

A list of materials and equipment to be installed, manufacturer's descriptive data, and such other data as may be requested by the Engineer shall be submitted for approval prior to purchase and fabrication.

Manufacturer's descriptive data shall include complete description, performance data and installation instructions for the materials and equipment specified herein.

The Contractor shall submit manufacturer's descriptive data to the Engineer for approval.

The Contractor shall allow 10 weeks for the review by the Engineer after all data are submitted.

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

Operation and Maintenance Manuals. Prior to the completion of the contract, 5 ~~identified~~ identical copies of the operation and maintenance instructions (with parts lists) shall be delivered to the Engineer. The instructions and parts lists shall be in a bound manual form and shall be complete and adequate for the equipment installed. Inadequate or incomplete material will be returned. The Contractor shall resubmit adequate and complete manuals at no expense to the State.

Manuals shall include, but not be limited to, the following:

- A. Index
- B. Vendor names, addresses and telephone numbers
- C. Manufacturer's published literature describing equipment capacity and function
- D. Complete operating and maintenance instructions with exploded views of assemblies and step by step sequence of assembly and disassembly.
- E. Complete nomenclature of all parts, part numbers and current cost
- F. Copies of all guarantees and warranties
- G. Copies of approved shop drawings
- H. Copies of "as-built" drawings
- I. Copies of approved catalog cuts
- J. Complete lubrication chart indicating location, type and frequency of lubrication
- K. Trouble shooting information
- L. Preventative maintenance requirements

Spare Parts

The Contractors shall supply the following items as spare parts. These shall be delivered to a location to be specified by the owner.

- 2 - piston motor driven powered trolleys
- 1 - passive trolley (complete)
- ~~4~~ 24 - brake actuator cylinders for the brake trolleys on the bikepath traveler.
- 100% extra quantity of brake pads for each traveler outfitted with Twiflex "dynamic" brakes
- 8 - trolley wheels for the powered trollies
- 2 – trolley wheels for the passive trollies
- 100 % extra quantity of nylon bearing for the large traveler (E2/E3 and SAS) suspension arms
- 4 – Twiflex caliper brake units complete
- 100% extra quantity of nylon bearings for sliding rail connections for traveler rails crossing the Hinge A joint.
- 10% extra quantity of 6.4 and 9.5 mm thick teflon pads for sliding rail connections
- 4 - extra throttle valves for control of the air powered trolleys and the linear actuator motors
- 2+ - extra air motors for operation of the linear actuators (one of each type)
- 10% extra, (minimum quantity 2) – of every other pneumatic circuit component
- 1 - extra M50 actuator unit without load screw
- 1 - extra M30 actuator unit without load screw
- 100% extra quantity of the assembly pins for the large traveler suspension systems
- 20% spares for the skew control limit switch valves

Supply Only Items

The following items are to be supplied which are not specifically shown on the plans.

- A. Two – 10 ton capacity chain falls for each of the E2/E3 travelers – total 4
- B. A steel tool and storage box 1 m x 0.8 m x 0.8 m for each of the 5 travelers, to be left on the traveler.

Trolley Units and Actuator

The steel used for the support wheels, gears, axles, bushings, and other appurtenances shall be specified by the respective manufacturer or Contractor. Wheels shall be either cast or forged. The steel classification and specifications shall be submitted to the Engineer for approval prior to purchasing and fabrication.

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 24 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

All components of the mechanical and pneumatic systems shall be designed to be compatible with each other and with the structural components.

MEASUREMENT AND PAYMENT

Maintenance travelers, of the types shown on the Engineer's Estimate, will be measured and paid for on a lump sum basis.

The contract lump sum price paid for maintenance travelers of the types listed in the Engineer's Estimate shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in the maintenance travelers, complete in place, including, but not limited to, detailing, mechanical component selection, assembly, erection, shop and field testing, and operator instruction, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

CONTRACT CHANGE ORDER MEMORANDUM

DATE: 9/16/2009

Page 1 of 2

DC-CEM-4903 (OLD HC-39 REV. 6/93) CT# 7541-3544-0

TO Pete Siegenthaler, Principal TE			FILE 04-0120F4		
FROM Gary Pursell, STE / Richard Morrow, SBE			04-SF-80-13.2/13.9		
CCO NO. 24	SUPPLEMENT NO. 1	CATEGORY CODE CHPK	CONTINGENCY BALANCE (including this change) \$66,552,044.40		
\$2,500,000.00			HEADQUARTERS APPROVAL REQUIRED? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		
SUPPLEMENTAL FUNDS PROVIDED \$			IS THIS REQUEST IN ACCORDANCE WITH YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		
CCO DESCRIPTION: Traveler Mechanical			DRAFT CCO 024s1 - CCO Memo v05 20091002 to TBPOC.doc		
Original Contract Time 2490 Day(s)	Time Adj.: This Change 0 Day(s)	Time Adjustments 150 Day(s)	(including this change) 6 %	Time CCO(s): (including this change) 6	

THIS CHANGE ORDER PROVIDES FOR:

Modifying traveler system mechanical components, providing test track, and performing traveler testing. Traveler system changes consist of modifying motors, trolleys, brakes, paint, and protective coatings. Also providing an anti-skew and dynamic brake systems. Prior to shipping to the project site, performance testing the first traveler system on a Contractor fabricated traveler test track.

This change incorporates Addendum No.8 traveler system modifications and resolves Change Request (CR) Nos. 8 and 13 from Department Bridge Design Oversight. Modifications addressed in this change order were originally to be incorporated into the contract bid documents as Addendum No.8. The Toll Bridge Project Oversight Committee (TBPOC) subsequently directed that Addendum No. 8 not be issued and that these changes be incorporated into the contract via change order after bid award.

Anti-skew and dynamic brake systems were added to mitigate operational and safety concerns, pursuant to lessons learned on other toll bridge contracts. Contract Change Order 24 Supplement 0 revises the traveler rail in order to accommodate the anti-skew devices and dynamic brake system being incorporated by this change order. The Contractor will build a test track and conduct performance tests to validate the traveler systems before incorporation into the work.

This change also resolves Contractor submitted Requests for Information (RFI's) 1050R0, 1112R0, 1598R0, 1599R0, and 1763R0.

This supplemental change is estimated to total \$2,500,000.00, which can be financed from the contingency fund. This will result in a cumulative amount of \$3,250,000.00 for this change order. A detailed cost estimate is on file.

There will be no time adjustment for this change, as it does not affect the controlling operation.

This change order received concurrences from Gary Pursell (Resident Engineer), Rick Morrow (Structure Rep.), Rich Foley (HQ Liason), Peter Siegenthaler (Principal Engineer), Marwan Nader (Design of Record), Wenyi Long (OSCM Oversight), Lina Ellis (OSMI Oversight) and Ken Terpstra (Project Manager).

This change order (24S0 and 24S1) has received Division of Construction (HQ) Authority to Proceed on September 3, 2009.

The Resident Engineer requests approval from TBPOC for this change.

CONTRACT CHANGE ORDER MEMORANDUM

DATE: 9/16/2009

Page 2 of 2

DC-CEM-4903 (OLD HC-39 REV. 6/93) CT# 7541-3544-0

CONCURRED BY:		ESTIMATE OF COST	
CONSTRUCTION ENGINEER	DATE	THIS REQUEST	TOTAL TO DATE
Res. Eng. Gary Pursell, Sup. TE	9/1/09		
SR. BRIDGE ENGINEER	DATE	ITEMS	\$0.00 (\$487,676.00)
Rick Morrow, Sup. BE	9/1/09	FORCE ACCOUNT	\$0.00 \$500,000.00
FHWA REPRESENTATIVE	DATE	AGREED PRICE	\$0.00 \$328,336.00
		ADJUSTMENT	\$2,500,000.00 \$1,659,340.00
PROJECT MANAGER	DATE	TOTAL	\$2,500,000.00 \$3,500,000.00
Proj. Manager, Ken Terpstra	9/16/09	FEDERAL PARTICIPATION	
OTHER (SPECIFY)	DATE	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING	
HQ, Patrick Treacy	8/16/09		
Design of Record, Marwan Nader	8/24/06		
OSCM Oversight, Wenyi Long	7/1/09		
OSMI Oversight, Lina Ellis	7/1/09		
	DATE	FEDERAL SEGREGATION (IF MORE THAN ONE FUNDING SOURCE OR P.I.P. TYPE)	
PCE, Peter Siegenthaler, Prin TE		<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS	
DISTRICT PRIOR APPROVAL BY	DATE	FEDERAL FUNDING SOURCE	PERCENT
HQ (ISSUE & APPROVE) (TO PROCEED) BY	DATE	_____	_____
HQ ATP (Bob Morales)	9/3/09	_____	_____
RESIDENT ENGINEER SIGNATURE	DATE	_____	_____
		_____	_____

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 126 Suppl. No. 0 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

To: **AMERICAN BRIDGE/FLUOR ENTERPRISES INC A JOINT VENTURE**

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (See account.) Unless otherwise stated, rates for rental of equipment cover only such costs. This last percentage shown is the net accumulated increase or decrease from the

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CCO 126 - CCO v01 20090819 SF.doc

and price and force
will be made for idle time.

Adjustment of Compensation at Lump Sum Price:

Provide a "Free Hanging" cable condition during erection and compaction of the PWS main cable. The corner section of Eastbound and Westbound OBG Lift 12 shall be left out during fabrication and then field installed after erection and compaction of the PWS main cable.

This change order fully resolves Notice of Potential Claim (NOPC) 5.

For this work, the Contractor will receive a lump sum price of \$2,000,000.00. This sum constitutes full and complete compensation for furnishing all labor, material, tools and incidentals including all markups, all direct and indirect costs, all overhead expenses, and all associated project impacts by reason of this Change.

Consideration of a time adjustment regarding Extra Work at Force Account will be deferred until completion of the work specified herein. Determination of a commensurate time adjustment will be made in accordance with Section 10-1.13, "PROGRESS SCHEDULE (CRITICAL PATH METHOD)" and Section 10-1.14, "TIME-RELATED OVERHEAD" of the Special Provisions, as well as Section 8-1.07, "LIQUIDATED DAMAGES", of the Standard Specifications.

Cost of Adjustment of Compensation at Lump Sum Price\$2,000,000.00

Estimated Cost: Increase ☒ Decrease ☐ **\$2,000,000.00**

By reason of this order the time of completion will be adjusted as follows: **Deferred**

Submitted by

Signature	Resident Engineer	Gary Pursell, Sup.T.E.	Date
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Approval Recommended by

Signature	Supervising Bridge Engineer	Richard Morrow, Sup.B.E.	Date
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Engineer Approval by

Signature	Principal Transportation Engineer	Peter Siegenthaler, Prin.T.E.	Date
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We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature	(Print name and title)	Date
-----------	------------------------	------

CONTRACT CHANGE ORDER MEMORANDUM

DATE: 8/208/2009

Page 1 of 1

DC-CEM-4903 (OLD HC-39 REV. 6/93) CT# 7541-3544-0

TO Pete Siegenthaler, Principal TE			FILE 04-0120F4	
FROM Gary Pursell, STE / Richard Morrow, SBE			04-SF-80-13.2/13.9	
CCO NO. 126	SUPPLEMENT NO. 0	CATEGORY CODE FHBB	CONTINGENCY BALANCE (including this change) \$67,005,863.40	
\$2,000,000.00 INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/> SUPPLEMENTAL FUNDS PROVIDED \$			HEADQUARTERS ADDRESS: <input type="checkbox"/> DRAFT CCO 126 - CCO Memo v05 20090928.doc <input type="checkbox"/> PROJECT DESCRIPTION CONSTRUCT SELF-ANCHORED SUSPENSION BRIDGE	
CCO DESCRIPTION: Free Hanging PWS Main Cable				
Original Contract Time 2490 Day(s)	Time Adj.: This Change 0 Day(s)	Previously Approved CCO Time Adjustments 150 Day(s)	Percentage Time Adjusted: (including this change) 6 %	Total # of Unreconciled Deferred Time CCO(s): (including this change) 6

THIS CHANGE ORDER PROVIDES FOR:

A "Free Hanging" cable condition during erection and compaction of the Parallel Wire Strand (PWS) main cable. The corner section of Eastbound and Westbound Orthogonal Box Girder (OBG) Lift 12 shall be left out during fabrication and then field installed after erection and compaction of the PWS main cable.

The contract documents indicate a "free hanging" cable position is present for suspension cable compaction prior to load transfer. However, the contract documents do not adequately address the interference between the suspension cable and the OBG during construction. The Contract plans provide a detailed eleven-step OBG and cable erection process but failed to address the significant amount of extra work required to provide the required free hanging cable needed for cable compaction. The suspension cable compaction equipment is required to achieve 21% void ratio in order for suspender bands and saddles to function as designed. In order to properly compact the cable strands and achieve a 21% void ratio, the suspension cable must be in a free hanging position. Due to interference between the PWS main cable and the OBG corner sections, the Contractor must omit the corner sections from panel points 111+700 to 116+700 during fabrication and field install them after erection and compaction of the PWS main cable. Field installing the OBG corner sections is not addressed in the contract documentation, nor was it contemplated before project bidding during the Contractor Outreach Program.

Although the contract plans adequately address other cable interference locations such as the conflict at the east anchorage from panel points 120+500 to 125+000. Several plan sheet details of the east anchorage conflict location are provided, alerting the Contractor of the work required (refer to plan sheets 985 and 986 titled "East Anchorage Construction Details No. 1 and East Anchorage Construction Details No.2, respectively). No such details are provided to alert the Contractor of the significant work required to achieve a free hanging cable at Panel Points 111+700 to 116+700, which includes the following:

- Additional fabrication required to support an incomplete OBG lift.
- Additional fabrication required to support the unattached corner assemblies.
- Additional shipping and engineering required to ship an incomplete OBG lift.
- Additional work required to lift the corner assemblies for field installation.
- Additional temporary supports and framework required to hold the compacted cable off the structure while the corner assemblies are attached.
- Additional field bolting, welding, painting, and assembly work.

None of the above listed work is addressed in the 11-step construction process shown starting on plan sheet 969. This information should have been included in Step 6 of the process where lift 12 (heavy lift 3) is shown.

After thoroughly analyzing all possible alternatives, the Department and the Contractor agree that this change represents the best possible solution. The Department has an established Cable Engineering and Risk Management (CERM) team that addresses cable related challenges. This team has evaluated over a dozen possible cable erection options and concluded that achieving a free hanging cable by omitting the corner sections of the OBG in Lift 12 segments is the best possible method. The CERM team has reviewed the extra work submitted by the Contractor and is in agreement that this is the best approach to providing a free hanging cable condition.

CONTRACT CHANGE ORDER MEMORANDUM

DATE: 8/208/2009

Page 2 of 1

DC-CEM-4903 (OLD HC-39 REV. 6/93) CT# 7541-3544-0

This work is not covered by any contract items. Therefore, payment for this work will be at Adjustment of Compensation at Lump Sum for a cost of \$2,000,000.00, which can be financed from the contingency fund. A detailed cost analysis is on file.

This change order also fully resolves the direct cost of Request for Change Order (RFCO) 19 Notice of Potential Claim (NOPC) 5 submitted by the Contractor, due to changes in character of the work.

Although an analysis of the schedule does not show this work as having any impact to the critical path at this time, the Department and the Contractor agree that time will be differed until completion of the work as it could potentially impact the critical path.

This change order received concurrences from Gary Pursell (Resident Engineer), Rick Morrow (Structure Rep.), Pete Siegenthaler (Principal Engineer), Wenyi Long (Bridge Design Oversight), Ken Terpstra (Project Manager), and Brian Maroney (Deputy Project Director). Maintenance concurrences are not required for this change.

This change order requires HQ and TBPOC approval.

CONCURRED BY:		ESTIMATE OF COST	
CONSTRUCTION ENGINEER	DATE	THIS REQUEST	TOTAL TO DATE
Res. Eng. Gary Pursell, Sup. TE			
SR. BRIDGE ENGINEER	DATE	ITEMS	\$0.00
Rick Morrow, Struct. Rep.		FORCE ACCOUNT	\$0.00
FHWA REPRESENTATIVE	DATE	AGREED PRICE	\$0.00
		ADJUSTMENT	\$2,000,000.00
PROJECT MANAGER	DATE	TOTAL	\$2,000,000.00
Proj. Manager, Ken Terpstra	6/08/09		\$2,000,000.00
OTHER (SPECIFY)	DATE	FEDERAL PARTICIPATION	
Design of Record, Marwan Nader		<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING	
	DATE	FEDERAL SEGREGATION (IF MORE THAN ONE FUNDING SOURCE OR P.I.P. TYPE)	
PCE, Peter Siegenthaler, Prin TE	6/08/09	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS	
DISTRICT PRIOR APPROVAL BY	DATE	FEDERAL FUNDING SOURCE	PERCENT
HQ (ISSUE & APPROVE) (TO PROCEED) BY	DATE		
RESIDENT ENGINEER SIGNATURE	DATE		

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** October 8, 2009

FR: Peter Lee, Senior Transportation Engineer, BATA

RE: Agenda No. - 3d
Item- New Benicia-Martinez Bridge Project
Landscaping Contract (EA 04-0060C4)

Recommendation:
APPROVAL

Cost:
\$3,500,000.00

Schedule Impacts:
N/A

Discussion:

As part of the New Benicia-Martinez Bridge Project, the Department has committed to landscaping areas in and around the new and existing Benicia-Martinez Bridges that have been impacted by the recently completed construction project. The bulk of the replacement planting is on the Benicia side of the bridge in the I-680/I-780 Interchange area, including at the existing vista point area located at the old toll plaza location.

The contract is scheduled to advertise on October 19, 2009 with a scheduled bid opening on November 17, 2009. The current engineer's estimate for the contract is \$1.5 million. BATA has budgeted \$3.5 million for the work and will take a final allocation action on the contract after bids are opened and the Department has determined the lowest responsive bidder for the work.

Staff is requesting that the TBPOC approve this item for contract advertisement and award for an amount not to exceed \$3.5 million.

Attachment(s):
N/A

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** October 8, 2009

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 4a
Progress Reports
Item- Final September 2009 Monthly Progress Report

Recommendation:

For Information / **APPROVAL** Confirmation

Cost:

N/A

Schedule Impacts:

N/A

Discussion:

Included in this packet is a final version of the September 2009 Monthly Progress Report. The PMT approved this report on October 6 through delegated TBPOC authority and requests TBPOC confirmation of this approval.

Attachment(s):

Monthly Progress Report September 2009 (see end of binder)

TOLL BRIDGE SEISMIC RETROFIT AND REGIONAL MEASURE 1 PROGRAMS

MONTHLY PROGRESS REPORT SEPTEMBER 2009



**TOLL BRIDGE PROGRAM
OVERSIGHT COMMITTEE**

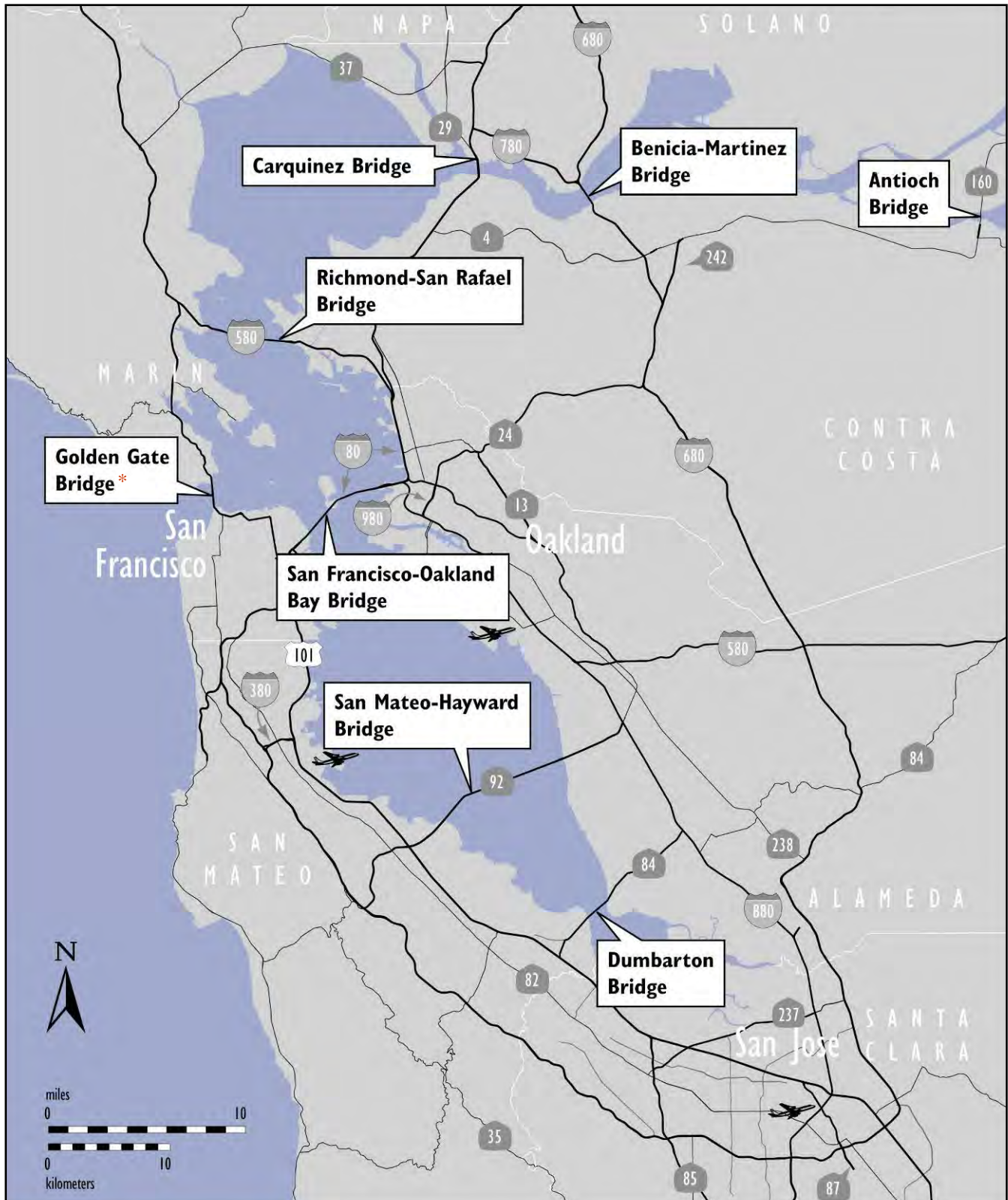
CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION



Table of Contents

Introduction.....	1
Summary of Major Project Highlights, Issues, and Actions.....	2
Toll Bridge Seismic Retrofit Program Cost Summary.....	6
Toll Bridge Seismic Retrofit Program Schedule Summary.....	7
Regional Measure 1 Program Cost Summary.....	8
Regional Measure 1 Program Schedule Summary.....	9
Toll Bridge Seismic Retrofit Program	11
San Francisco-Oakland Bay Bridge Seismic Retrofit Strategy.....	12
San Francisco-Oakland Bay Bridge East Span Replacement Project Summary.....	15
Yerba Buena Island Detour (YBID)	16
YBID East Tie-in Opening Activities	18
Yerba Buena Island Transition Structures (YBITS)	20
Self-Anchored Suspension (SAS) Bridge.....	22
SAS Construction Sequence	24
SAS Superstructure Fabrication Activities	26
SAS Superstructure Field Activities	29
Skyway.....	32
Oakland Touchdown (OTD).....	33
Other Contracts.....	34
Other Completed Projects.....	36
Risk Management	38
Seismic Retrofit of Dumbarton and Antioch Bridges.....	44
Dumbarton Bridge Seismic Retrofit Project	46
Antioch Bridge Seismic Retrofit Project	48
Project Cost and Schedule Summaries.....	50
Regional Measure 1 Toll Bridge Program.....	54
New Benicia-Martinez Bridge Project.....	54
Interstate 880/State Route 92 Interchange Reconstruction Project	56
Other Completed Projects	58
Appendices	61

Map of Bay Area Toll Bridges



* The Golden Gate Bridge is owned and operated by the Golden Gate Bridge, Highway, and Transportation District.

Introduction

In July 2005, Assembly Bill (AB) 144 (Hancock) created the Toll Bridge Program Oversight Committee (TBPOC) to implement a project oversight and project control process for the Benicia-Martinez Bridge project and the State Toll Bridge Seismic Retrofit Program projects. The TBPOC consists of the Caltrans Director, the Bay Area Toll Authority (BATA) Executive Director and the Executive Director of the California Transportation Commission (CTC). The TBPOC's project oversight and control processes include, but are not limited to, reviewing bid specifications and documents, providing field staff to review ongoing costs, reviewing and approving significant change orders and claims in excess of \$1 million (as defined by the committee) and preparing project reports.

AB 144 identified the Toll Bridge Seismic Retrofit Program and the new Benicia-Martinez Bridge Project as being under the direct oversight of the TBPOC. The Toll Bridge Seismic Retrofit Program includes:

Toll Bridge Seismic Retrofit Projects	Seismic Safety Status
San Francisco-Oakland Bay Bridge East Span Replacement	Construction
San Francisco-Oakland Bay Bridge West Approach Replacement	Complete
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit	Complete
San Mateo-Hayward Bridge Seismic Retrofit	Complete
Richmond-San Rafael Bridge Seismic Retrofit	Complete
1958 Carquinez Bridge Seismic Retrofit	Complete
1962 Benicia-Martinez Bridge Seismic Retrofit	Complete
San Diego-Coronado Bridge Seismic Retrofit	Complete
Vincent Thomas Bridge Seismic Retrofit	Complete

The new Benicia-Martinez Bridge is part of a larger program of toll-funded projects called the Regional Measure 1 (RM1) Toll Bridge Program under the responsibility of BATA and Caltrans. While the rest of the projects in the RM1 program are not directly under the responsibility of the TBPOC, BATA and Caltrans will continue to report on their progress as an informational item. The RM1 program includes:

Regional Measure 1 Projects	Open to Traffic Status
Interstate 880/State Route 92 Interchange Reconstruction	Construction
1962 Benicia-Martinez Bridge Reconstruction	Open
New Benicia-Martinez Bridge	Open
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	Open
Richmond-San Rafael Bridge Trestle, Fender & Deck Joint Rehabilitation	Open
Westbound Carquinez Bridge Replacement	Open
San Mateo-Hayward Bridge Widening	Open
State Route 84 Bayfront Expressway Widening	Open
Richmond Parkway	Open

SUMMARY OF MAJOR PROJECT HIGHLIGHTS, ISSUES, AND ACTIONS



SAS Lifts 4E, 3E and CB3 Loaded on the Ship



SAS Temporary Eastbound and Westbound Towers and Trusses



SAS Loading of Segment 3W onto Ship

Toll Bridge Seismic Retrofit Program Risk Management

A major element of Assembly Bill 144 of 2005, the law creating the TBPOC, was legislative direction to implement a more aggressive risk management program. Such a program has been implemented in stages over time to ensure development of a robust and comprehensive approach to risk management. We have reached a milestone with our risk management program with all elements now fully incorporated, resulting in one of the most detailed and comprehensive risk management programs in the country today. There is a risk assessment done for each project. The forecast is based on the 50% probable cost of risk (average). It is possible our forecasts could decrease as risks are resolved and retired. Nonetheless, we want to ensure that the public is fully informed of the risks we have identified and the possible expense they could necessitate. It is important to note that the \$689.7 million TBPOC Second Quarter of 2009 Approved Budget Program Contingency is sufficient to cover identified risks to a 95% confidence level. Ongoing risk mitigation actions will continue to be developed and implemented to reduce the potential draw on Program Contingency (see page 38 for further details).

San Francisco-Oakland Bay Bridge (SFOBB) East Span Seismic Replacement Project

SAS Superstructure Contract

The contractor for the Self-Anchored Suspension (SAS) Bridge, American Bridge/Fluor, continues work on both the fabrication of major bridge components around the world and on the temporary support structures in the bay.

The contractor has reported that fabrication of the steel tower and roadway boxes has fallen a number of months behind schedule due to the shop fabrication drawing preparation process and the complexity of the design and fabrication. Delays, including those specifically related to lifts 13 and 14 of the steel roadway boxes at the east end of the bridge, may prevent the westbound opening of the bridge in 2012, but have not yet affected the expected full opening date of the bridge in 2013.

In August, the TBPOC traveled to Canada and China to meet with the contractor and their sub-contractors to evaluate all options to accelerate the project and to



SAS North Shaft Lift 1 Blasted and Painted

ensure quality specifications are being met. The TBPOC is exploring options to improve review times and communication, including locating additional design staff with shop drawing drafters in Vancouver.

On fabrication, ABF, ZPMC and Caltrans will continue their rigorous quality review of all fabricated bridge parts and will ensure that bridge components will only ship when ready.

The roadway box lifts 1 through 4 are continuing to be readied for voyage 1 shipment (see photo on top left of page 2). The remaining roadway boxes and tower segments continue to be fabricated.

Out on the bay, the contractor continues to erect and has completed approximately 60 percent of the temporary support structures that span from Yerba Buena Island to the Skyway. These structures will support the SAS bridge before the cable system is installed.

Caltrans has established risk management teams to evaluate future potential risks to completing the project on time and on budget. In particular, teams are reviewing cable erection plans and mitigation schedules. Based on the last risk management assessment, there is a potential for a \$305 million increase on the SAS contract.

Yerba Buena Island Detour Contract

The Yerba Buena Island Detour contractor, CC Myers, has rolled out the existing bridge span and rolled in the new east tie-in span of the detour structure that diverts traffic off the existing bridge to the detour structure that now ties into the Yerba Buena Island tunnel. The traffic switch occurred as scheduled after Labor Day weekend. The contractor continues to make progress on a number of accelerated foundations for the future transition structure from the Self-Anchored Suspension Bridge to the tunnel.

Based on the last completed risk management assessment, there was a potential for a \$34 million increase for the contract. This assessment is expected to decrease next quarter. Remaining risks include unexpected construction challenges during demolition of the old structure which are being addressed via collaborative on-site meetings between Caltrans and the contractor to actively identify and resolve issues early and at the least cost.



East Tie-In Completed

SUMMARY OF MAJOR PROJECT HIGHLIGHTS, ISSUES, AND ACTIONS



View of SAS Temporary Truss

TBSRP Capital Outlay Support

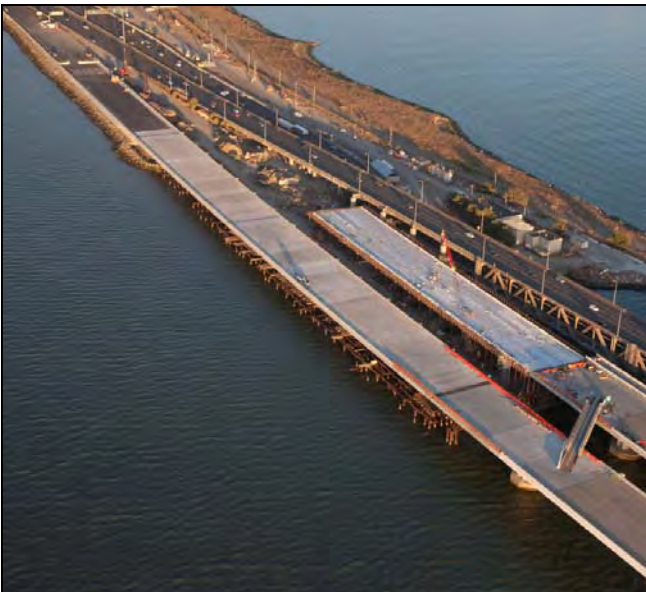
Based on initial discussions with our contractors, early completion of the East Span Project was believed to be possible and sufficient to mitigate potential identified support cost increases. The support cost increases are due primarily to the need to re-advertise the SAS contract and by decisions made to increase our opportunities for early completion of the East Span project and potential for support cost savings. These decisions include a 12-month schedule extension provided during bid time to attract the maximum number of bidders for the SAS contract and extension of the YBI Detour contract to advance future foundation and column work of the transition structure and west end deck reconstruction. Since we now judge early completion and the attendant cost savings to be less likely, we forecast a potential drawdown of \$244 million from the program contingency for project support. Further increases in project support costs would be expected if the project is delayed beyond the 2013 forecast bridge opening date.

TBSRP Programmatic Risks

This category includes risks that are not yet scoped within existing contracts and/or spread across multiple contracts. The interdependencies between all the contracts in the program result in the potential for delays on one contract to impact the other contracts in the overall program of contracts. A net potential drawdown of \$50 million from the program contingency is forecast for these risks.

Oakland Touchdown Contract

In early August, the Oakland Touchdown contractor opened construction access on the new westbound OTD structure to the Skyway (see aerial photo on left). Work continues on the eastbound structure



Aerial View of Oakland Touchdown Newly Opened Construction Access Westbound to the Skyway



Prototype of Bearing for the Antioch Bridge Seismic Retrofit Project

Seismic Retrofit of the Dumbarton and Antioch Bridges

When first conceived, the Toll Bridge Seismic Retrofit Program only identified seven of the nine state-owned toll bridges to be in need of seismic retrofit, excluding the Dumbarton and Antioch bridges. Further seismic vulnerability studies were completed by Caltrans and BATA on those structures, which determined that both structures were in need of retrofit based on current seismic standards. The total cost to retrofit both structures is estimated to be \$950 million. State Assemblyman Tom Torlakson is sponsoring Assembly Bill 1175 to amend the Toll Bridge Seismic Retrofit Program to include the Antioch and Dumbarton bridges and to make the projects eligible for TBSRP funding. The bill has been forwarded to the governor for signature. Design plans for both bridges are currently being prepared with advertisement of the projects expected in early 2010.

New Benicia-Martinez Bridge Project

A new southbound I-680 was opened to traffic in early August. The new bicycle/pedestrian path opened on August 29th. The contract is now substantially complete.



New Pedestrian Bicycle Path on Benicia-Martinez Bridge Under Construction

Interstate 880/State Route 92 Interchange Reconstruction Project

On the Interchange Reconstruction Contract, the new east Route 92 to North Interstate 880 direct connector structure (ENCONN) was completed and opened to detour traffic on May 16, 2009. Work is now ongoing on a new separator structure. The Department and BATA have revised the support forecast for the project. The increase in support is due to extended advertisement for the project and weather delays. The project is still forecast to be completed as planned in June 2011.



Site Preparation for New Route 92 and Interstate 880 Separator

Toll Bridge Seismic Retrofit Program Cost Summary

	Contract Status	AB 144/SB 66 Budget (Jul 2005)	TBPOC Approved Changes	Current TBPOC Approved Budget (August 2009)	Cost to Date (August 2009)	Current Cost Forecast (August 2009)	Cost Variance	Cost Status
		a	b	c = a + b	d	e	f = e - c	
SFOBB East Span Seismic Replacement								
Capital Outlay Construction								
Skyway	Completed	1,293.0	(38.9)	1,254.1	1,236.9	1,254.1	-	●
SAS Marine Foundations	Completed	313.5	(32.6)	280.9	275.0	280.9	-	●
SAS Superstructure	Construction	1,753.7	-	1,753.7	807.0	2,058.6	304.9	●
YBI Detour	Construction	132.0	360.8	492.8	371.6	526.7	33.9	●
YBI Transition Structures (YBITS)		299.3	(23.2)	276.1	-	285.9	9.8	●
YBITS 1	Advertised	-		-	-	223.2	-	●
YBITS 2	Design	-	-	-	-	59.4	-	●
YBITS Landscaping	Design	-		-	-	3.3	-	●
Oakland Touchdown		283.8	-	283.8	188.2	289.8	6.0	●
OTD 1	Construction	-		-	180.3	211.8	-	●
OTD 2	Design	-		-	-	64.0	-	●
OTD Electrical Systems	Design	-		-	-	4.4	-	●
Submerged Electric Cable	Completed	-			7.9	9.6	-	●
Existing Bridge Demolition	Design	239.2		239.2	-	232.1	(7.1)	●
Stormwater Treatment Measures	Completed	15.0	3.3	18.3	16.7	18.3	-	●
Other Completed Contracts	Completed	90.3	-	90.3	89.3	90.3	-	●
Capital Outlay Support		959.3	-	959.3	760.7	1,203.1	243.8	●
Right-of-Way and Environmental Mitigation		72.4	-	72.4	51.2	72.4	-	●
Other Budgeted Capital		35.1	(3.3)	31.8	0.7	7.7	(24.1)	●
Total SFOBB East Span Replacement		5486.6	266.1	5,752.7	3,797.3	6,319.9	567.2	
SFOBB West Approach Replacement								
Capital Outlay Construction	Completed	309.0	41.7	350.7	328.1	340.7	(10.0)	●
Capital Outlay Support		120.0	-	120.0	116.5	117.0	(3.0)	●
Total SFOBB West Approach Replacement		429.0	41.7	470.7	444.6	457.7	(13.0)	
Completed Program Projects	Completed	1,839.4	(97.5)	1,741.9	1,712.6	1,741.9	-	●
Miscellaneous Program Costs		30.0	-	30.0	24.7	30.0	-	●
Net Programmatic Risks		-	-	-	-	49.8	49.8	●
Program Contingency		900.0	(210.3)	689.7	-	85.7	(604.0)	●
Total Toll Bridge Seismic Retrofit Program		8,685.0	-	8,685.0	5,979.2	8,685.0	-	●

- Within approved schedule and budget
- Identified potential project risks that could significantly impact approved schedules and budgets if not mitigated
- Known project impacts with forthcoming changes to approved schedules and budgets

Toll Bridge Seismic Retrofit Program Schedule Summary

	AB144/SB 66 Project Completion Schedule Baseline	TBPOC Approved Changes (Months)	Current TBPOC Approved Completion Schedule (August 2009)	Current Completion Forecast (August 2009)	Schedule Variance (Months)	Schedule Status	Remarks/Notes
	g	h	i = g + h	j	k = j - i	l	
SFOBB East Span Seismic Replacement							
Contract Completion							
Skyway	Apr 2007	8	Dec 2007	Dec 2007	-	●	See Page 32
SAS Marine Foundations	Jun 2008	(5)	Jan 2008	Jan 2008	-	●	See Page 22
SAS Superstructure	Mar 2012	12	Mar 2013	Mar 2013	-	●	See Page 23
YBI Detour	Jul 2007	41	Dec 2010	Dec 2010	-	●	See Page 16
YBI Transition Structures (YBITS)	Nov 2013	12	Nov 2014	Nov 2014	-		See Page 20
YBITS 1			Sep 2013	Sep 2013	-	●	
YBITS 2			Nov 2014	Nov 2014	-	●	
YBITS Landscaping			TBD	TBD	-	●	
Oakland Touchdown	Nov 2013	12	Nov 2014	Nov 2014	-		See Page 33
OTD 1			May 2010	May 2010	-	●	
OTD 2			Nov 2014	Nov 2014	-	●	
OTD Electrical Systems			TBD	TBD	-	●	
Submerged Electric Cable			Jan 2008	Jan 2008	-	●	
Existing Bridge Demolition	Sep 2014	12	Sep 2015	Sep 2015	-	●	
Stormwater Treatment Measures	Mar 2008	-	Mar 2008	Mar 2008	-	●	
SFOBB East Span Bridge Opening and Other Milestones							
OTD West bound Access			Jan 2010	Jan 2010	-	●	
YBI Detour Open			Sep 2009	Sep 2009	-	●	See page 18
West bound Open	Sep 2011	12	Sep 2012	Dec 2012	3	●	
East bound Open	Sep 2012	12	Sep 2013	Sep 2013	-	●	
SFOBB West Approach Replacement							
Contract Completion	Aug 2009	(7)	Jan 2009	Jan 2009	-	●	

Notes: 1) Figures may not sum up to totals due to rounding effects.
2) TBSRP Forecasts for the Monthly Reports are generally updated on a quarterly basis in conjunction with quarterly risk analysis assessments for the TBSRP Projects.

Regional Measure 1 Program Cost Summary

	Contract Status	BATA Baseline Budget (Jul 2005)	BATA Approved Changes	Current BATA Approved Budget (August 2009)	Cost to Date (August 2009)	Current Cost Forecast (August 2009)	Cost Variance	Cost Status
		a	b	c = a + b	d	e	f = e - c	
New Benicia-Martinez Bridge								
Capital Outlay Construction	Construction	861.6	174.0	1,035.6	994.4	1,035.6	-	●
Capital Outlay Support		157.1	35.1	192.1	190.2	192.1	-	●
Capital Outlay Right-of-Way		20.4	(0.1)	20.3	17.0	20.3	-	●
Project Reserve		20.8	3.7	24.5	-	24.5	-	
Total New Benicia-Martinez Bridge		1,059.9	212.7	1,272.5	1,201.6	1,272.5	-	
Interstate 880/Route 92 Interchange Reconstruction								
Capital Outlay Construction	Construction	94.8	60.2	155.0	75.2	155.0	-	●
Capital Outlay Support		28.8	34.6	63.4	49.1	63.4	-	●
Capital Outlay Right-of-Way		9.9	7.0	16.9	11.8	16.9	-	●
Project Reserve		0.3	9.4	9.7	-	9.7	-	
Total I-880/SR-92 Interchange Reconstruction		133.8	111.2	245.0	136.1	245.0	-	
Completed Program Projects		918.9	(30.0)	888.9	878.7	888.9	-	
Total Regional Measure 1 Toll Bridge Program		2,112.6	293.9	2,406.4	2,216.4	2,406.4	-	

- Within approved schedule and budget
- Identified potential project risks that could significantly impact approved schedules and budgets if not mitigated
- Known project impacts with forthcoming changes to approved schedules and budgets

Regional Measure 1 Program Schedule Summary

	BATA Baseline Completion Schedule (Jul 2005)	BATA Approved Changes (Months)	Current BATA Approved Completion Schedule (August 2009)	Current Completion Forecast (August 2009)	Schedule Variance (Months)	Schedule Status	Remarks/Notes
	g	h	i = g + h	j	k = j - i	l	
New Benicia-Martinez Bridge							
Contract Completion							
1962 BM Bridge Reconstruction	Dec 2009	(4)	Aug 2009	Aug 2009	-	●	See Page 54
New Benicia-Martinez Bridge Opening Date							
New Bridge	Dec 2007	(4)	Aug 2007	Aug 2007	-	●	
Interstate 880/Route 92 Interchange Reconstruction							
Contract Completion							
Interchange Reconstruction	Dec 2010	6	Jun 2011	Jun 2011	-	●	See Page 56

Notes: 1) Figures may not sum to totals due to rounding effects.



Yerba Buena Island Detour Roll-Out/Roll-In in Progress



TOLL BRIDGE SEISMIC RETROFIT PROGRAM

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge Seismic Retrofit Strategy

When a 250-ton section of the upper deck of the East Span collapsed during the 7.1-magnitude Loma Prieta earthquake in 1989, it was a wake-up call for the entire Bay Area. While the East Span quickly reopened within a month, critical questions lingered; how could the Bay Bridge - a vital regional lifeline structure - be strengthened to withstand the next major earthquake? Seismic experts from around the world determined that to make each of the separate elements seismically safe on a bridge of this size, the work must be divided into numerous projects. Each project presents unique challenges. Yet there is one common challenge - the need to accommodate the more than 280,000 vehicles that cross the bridge each day.

West Approach Seismic Replacement Project

Project Status: Completed 2009

Seismic safety retrofit work on the West Approach in San Francisco - bounded on the west by 5th Street and on the east by the anchorage of the west span at Beale Street - involved completely removing and replacing this one-mile stretch of Interstate 80, as well as six on and off-ramps within the confines of the West Approach's original footprint. This project was completed on April 8th, 2009.



Overview of the Completed West Approach Replacement Structure

West Span Seismic Retrofit Project

Project Status: Completed 2004

The West Span lies between Yerba Buena Island and San Francisco and is made up of two complete suspension spans connected at a center anchorage. Retrofit work included adding massive amounts of steel and concrete to strengthen the entire West Span, along with new seismic shock absorbers and bracing.



West Span of the Bay Bridge



East Span Seismic Replacement Project

Rather than a seismic retrofit, the two-mile-long East Span is being completely rebuilt. When completed, the new East Span will consist of several different sections, but will appear as a single streamlined span. The eastbound and westbound lanes of the East Span will no longer include upper and lower decks. The lanes will instead be parallel, providing motorists with expansive views of the bay. These views also will be enjoyed by bicyclists and pedestrians thanks to a new path on the south side of the bridge that will extend all the way to Yerba Buena Island. The new span will be aligned north of the existing bridge to allow traffic to continue to flow on the existing bridge as crews build the new span.

The new span will feature the world's longest Self-Anchored Suspension (SAS) bridge that will be connected to an elegant roadway supported by piers (Skyway), which will gradually slope down towards the Oakland shoreline (Oakland Touchdown). A new transition structure on Yerba Buena Island (YBI) will connect the SAS to the YBI tunnel and will transition the East Span's side-by-side traffic to the upper and lower decks of the tunnel and west span.

When construction of the new East Span is complete and vehicles have been safely rerouted to it, the original East Span will be demolished.



Architectural Rendering of New Self-Anchored Suspension Bridge



Yerba Buena Island Detour with the
Structure Rolled in

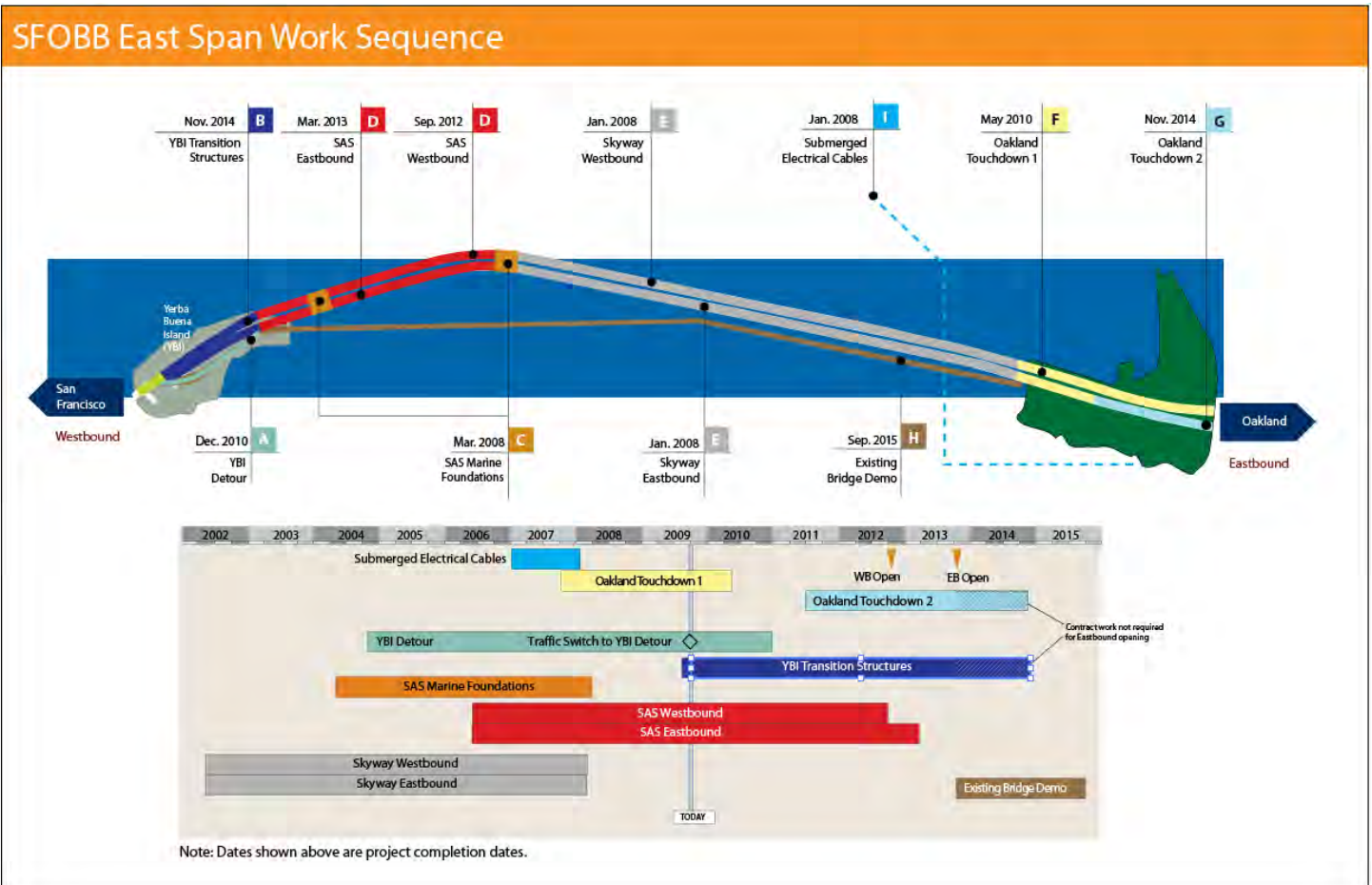


TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Summary

The new East Span bridge can be split into four major components - the Skyway and the Self-Anchored Suspension Bridge in the middle and the Yerba Island Transition Structures and Oakland Touchdown approaches at either end. Each component is being constructed by one to three separate contracts that all have been sequenced together.

Highlighted below are the major East Span contracts including their schedules. The letter designation before each contract corresponds to contract descriptions in the rest of the report.



TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Yerba Buena Island Detour (YBID)

As with all of the Bay Bridge's seismic retrofit projects, crews must build the Yerba Buena Island Transition Structures (YBITS) close to moving vehicles and without disrupting traffic. To accomplish this daunting task, YBID eastbound and westbound traffic was shifted off the existing roadway and onto a temporary detour on Labor Day weekend 2009. Drivers will use this detour, just south of the original roadway, until traffic is moved onto the new East Span.

A YBID Contract

Contractor: C.C. Myers Inc.

Approved Capital Outlay Budget: \$492.8 M

Status: 77% Complete as of August 2009

This contract was originally awarded in early 2004 to construct the detour structure for the planned 2006 opening of the new East Span. Due to the re-advertisement of the SAS superstructure contract in 2005 because of a lack of funding at the time, the bridge opening was rescheduled to 2013. To better integrate the contract into the current east span schedule and to improve seismic safety and mitigate future construction risks, the TBPOC has approved a number of changes to the contract, including adding the deck replacement work near the tunnel that was rolled into place over Labor Day Weekend 2007, advancing future transition structure foundation work and making design enhancements to the temporary detour structure.

These changes have increased the budget and forecast for the contract to cover the revised project scope and potential project risks.



Successful Labor Day Weekend 2007 Roll-In of Replacement Tunnel Approach Roadway

Tunnel Approach Roadway Replacement

The first in a series of activities to open the detour viaduct was completed in 2007 with the replacement of a 350-foot long stretch of upper deck roadway just east of the Yerba Buena Island tunnel. During this historic milestone, the entire Bay Bridge was closed over the 2007 Labor Day weekend so crews could demolish and replace the old section of the deck with a seismically upgraded 6,500-ton precast section of viaduct that was literally pushed into place (see photo above).

Status: Completed.

Detour Viaduct Fabrication and Construction

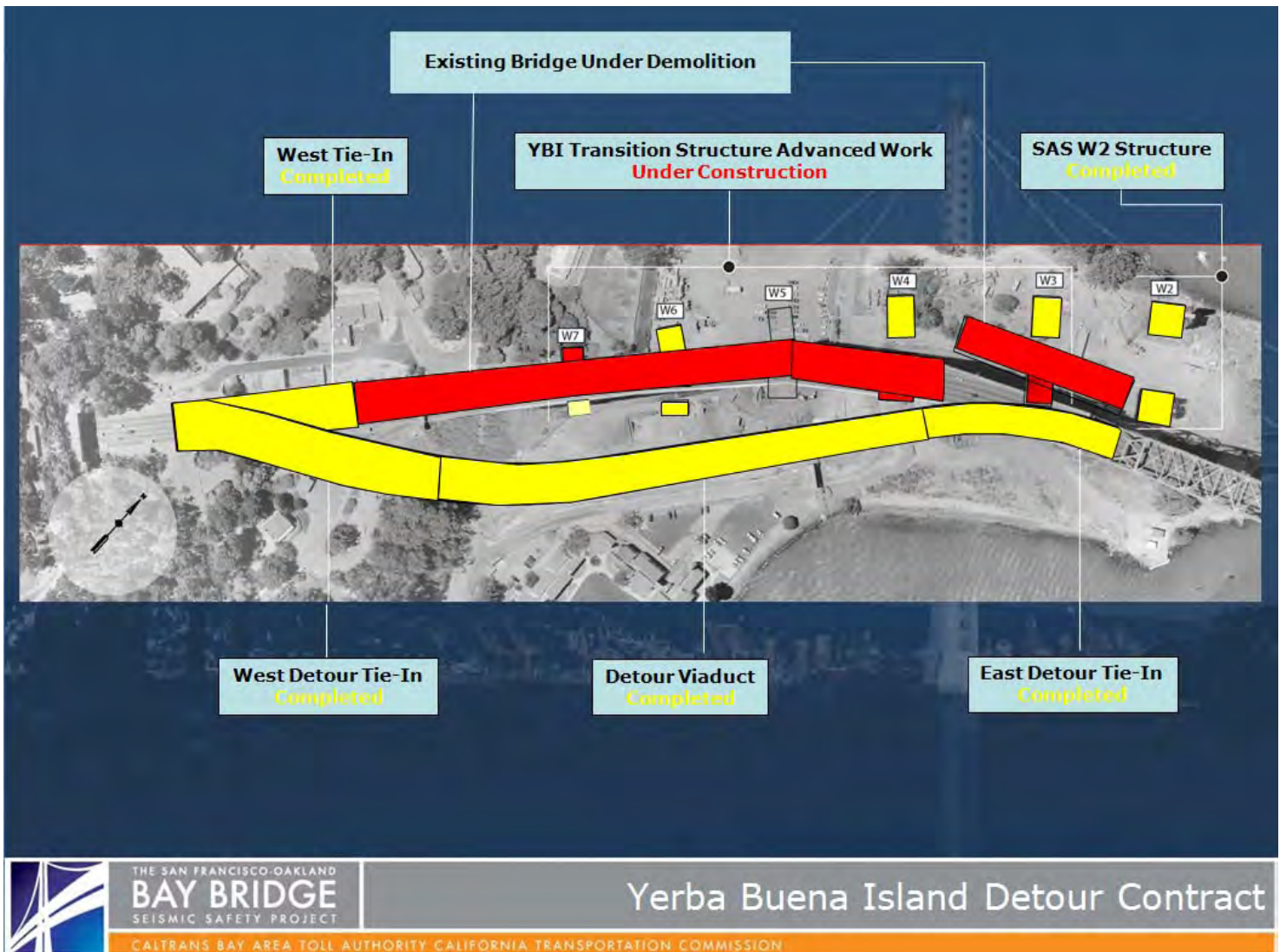
The detour viaduct runs parallel to the existing lanes on the island and ties back into the existing bridge and tunnel. Speed limits have been reduced due to the turns needed to get on and off the detour. The viaduct looks quite similar to the existing bridge with steel cross beams and girders and a concrete roadway deck. To insure a good fit, the steel viaduct truss members were pre-fitted during fabrication in South Korea and Oregon. Opening of the detour to traffic is discussed on the following page.

Status: Completed.

Demolition of Existing Viaduct

After shifting traffic onto the detour structure, crews will focus on the demolition of the existing transition structure into the tunnel. The old transition structure will need to be removed before construction of the new transition structures from the SAS bridge to the YBI tunnel can be completed.

Status: Started in early September 2009.



Overview of Yerba Buena Island Detour Contract Scope of Work and Current Status



TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Yerba Buena Island Detour (YBID) East Tie-in Opening Activities

Shifting traffic to the Yerba Buena Island detour was the most significant realignment of the bridge to date. To accomplish this, crews cut away a 288-foot portion of the existing truss bridge and replaced it with a connection to the detour. This dramatic maneuver involved aerial construction that occurred more than 100 feet above the ground. Vehicles will travel on the detour until the completion of the new East Span.

A detailed step-by-step construction sequence for the roll-out of existing span and roll-in of the new truss at the east tie-in to the detour viaduct structure is provided on the facing page.



Yerba Buena Island Detour Roll-Out Completed

Status: The east tie-in is completed.



Yerba Buena Island Detour East Tie-In Structure Roll-Out/Roll-In Completed

San Francisco-Oakland Bay Bridge East Span Replacement Roll-Out/Roll-In Sequence of Progress over Labor Day Weekend 2009



Stage 1



Stage 4



Stage 2



Stage 5



Stage 3



Stage 6

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Yerba Buena Island Transition Structures (YBITS)

The new Yerba Buena Island Transition Structures (YBITS) will connect the new SAS bridge to the existing Yerba Buena Island tunnel, transitioning the new side-by-side roadway decks to the upper and lower decks of the tunnel. The new structures will be cast-in-place reinforced concrete structures that will look very similar to the already constructed Skyway structures. While some YBITS foundations and columns have been advanced by the YBID contract, the remaining work will be completed under three separate YBITS contracts.



Yerba Buena Island Transition Column W7R Being Backfilled

B YBITS #1 Contract

Contractor: TBD

Current Capital Outlay Forecast: \$223.2 M

Status: **Advertised**

The YBITS #1 contract will construct the mainline roadway structures from the SAS bridge to the YBI tunnel. Work on the structures is scheduled to start once the existing structures have been demolished and removed from the site. An addendum to revise the bid opening date to December 15, 2009 was issued in May.



Rendering of Future Yerba Buena Island Transition Structures (top) with Detour Viaduct (bottom)

YBITS #2 Contract

Contractor: TBD

Current Capital Outlay Forecast: \$59.4 M

Status: **In Design**

The YBITS #2 contract will demolish the detour viaduct after all traffic is shifted to the new bridge and will construct a new eastbound on-ramp to the bridge in its place. The new ramp will also provide the final link for bicycle/pedestrian access off the SAS bridge onto Yerba Buena Island.

YBITS Landscaping Contract

Contractor: TBD

Current Capital Outlay Forecast: \$3.3 M

Status: **In Design**

Upon completion of the YBITS work, a follow-on landscaping contract will be executed to re-plant and landscape the area.

Yerba Buena Island Transition Structures Advanced Work

Due to the re-advertisement of the SAS superstructure contract in 2005, it became necessary to temporarily suspend the detour contract and make design changes to the viaduct. To make more effective use of the extended contract duration and to reduce overall project schedule and construction risks, the TBPOC approved the advancement of foundation and column work from the Yerba Buena Island Transition Structures contract.



Overview of YBITS Advanced Foundation and Column Work in Progress



TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Self-Anchored Suspension (SAS) Bridge

If one single element bestows the status of world class on the new Bay Bridge East Span, it is the Self-Anchored Suspension (SAS) bridge. This engineering marvel will be the world's largest SAS span at 2,047 feet in length, as well as the first bridge of its kind built with a single tower.

The SAS was separated into three separate contracts – construction of the land-based foundations and columns at Pier W2; construction of the marine-based foundations and columns at Piers T1 and E2; and the construction of the SAS steel superstructure, including the tower, roadway, and cabling. Construction of the foundations at Pier W2 and at Piers T1 and E2 was completed in 2004 and 2007, respectively.

SAS Land Foundation Contract

Contractor: West Bay Builders, Inc.

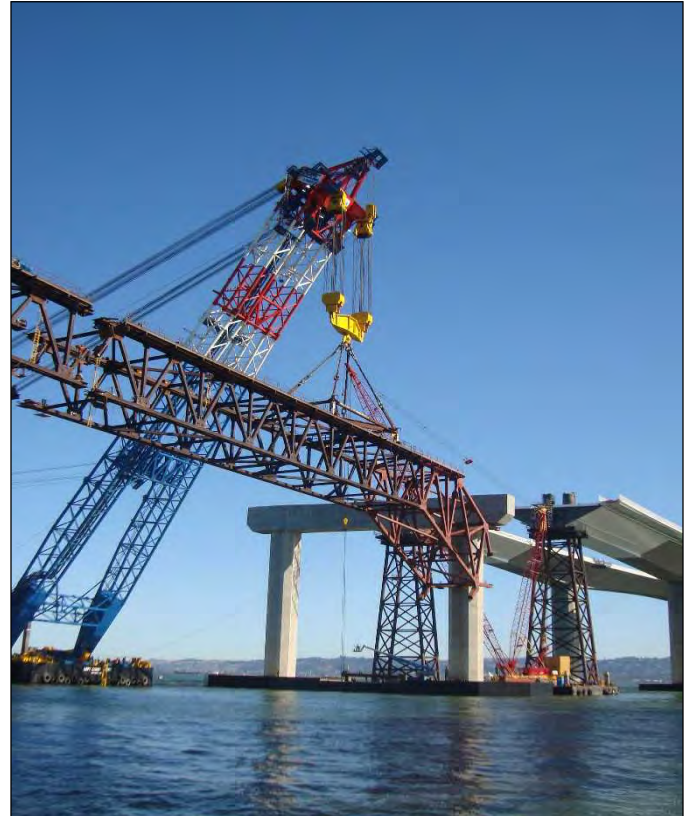
Approved Capital Outlay Budget: \$26.4 M

Status: Completed

The twin W2 columns on Yerba Buena Island provide essential support for the western end of the SAS bridge where the single main cable for the suspension span will extend down from the tower and wrap around and under the western end of the roadway deck. Each of these huge columns required massive amounts of concrete and steel and are anchored 80 feet into the island's solid bedrock.



SAS East Elevation of W2 (from water level)



SAS Pier Table at E2 with Left Coast Lifter

C SAS Marine Foundations Contract

Contractor: Kiewit/FCI/Manson, Joint Venture

Approved Capital Outlay Budget: \$280.9 M

Status: Completed

The single main suspension cable is anchored at Pier E2 and goes up and over the tower at Pier T1 before wrapping around column W2 on Yerba Buena Island before returning to Pier E2 (see rendering on facing page). Construction of the piers at E2 and T1 required significant on-water resources to drive the foundation support piles down not only to bedrock, but also through the bay water and mud.

The T1 foundation piles extend 196 feet below the waterline and are anchored into bedrock with heavily reinforced concrete rock sockets that are drilled into the rock. Driven nearly 340 feet deep, the steel and concrete E2 foundation piles were driven 100 feet deeper than the deepest timber piles of the existing east span in order to get through the bay mud and reach solid bedrock.

D SAS Superstructure Contract

Contractor: American Bridge/Fluor Enterprises, Joint Venture

Approved Capital Outlay Budget: \$1,753.7 M

Status: 44% Complete as of August 2009

Rising 525 feet above mean sea level and embedded in rock, the single-tower SAS span is designed to withstand a massive earthquake. The SAS bridge is not just another suspension bridge. Traditional main cable suspension bridges have twin cables with smaller suspender cables connected to them. These cables hold up the roadbed and are anchored to separate structures in the ground. While there will appear to be two main cables on the SAS, there will actually only be one. This single cable will be anchored within the eastern end of the roadway, carried over the tower and wrapped around the two side-by-side decks at the western end.

The single steel tower will be made up of four separate legs connected by shear link beams, which function in the same way as a fuse in an electrical circuit. These beams will absorb most of the impact from an earthquake, preventing damage to the tower legs.

The next several pages highlight the construction sequence of the SAS and are followed by detailed updates on specific construction activities.



Architectural Rendering of new Self-Anchored Suspension Span



TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Self-Anchored Suspension (SAS) Construction Sequence

STEP 1 - CONSTRUCT TEMPORARY SUPPORTS

Temporary support trusses will need to be erected from the Skyway to Yerba Buena Island to support the new SAS bridge during construction.

Status: Foundations for the temporary supports are complete. Support columns and trusses are now being installed from west to east.



STEP 2 - INSTALL ROADWAYS

The roadway boxes will be lifted into place by using the shear-leg crane barge. The boxes will be bolted and welded together atop the temporary support trusses to form two continuous parallel steel roadway boxes.

Status: The Roadway Box segments are being fabricated (see page 26 for more information).



STEP 3 - INSTALL TOWER

Each of the four legs of the tower will be erected in five separate lifts. The first lift will use the shear-leg crane barge while the remaining higher lifts will use a temporary support tower and lifting jacks.

Status: The first shipment of tower sections is being fabricated (see page 26 for more information).



STEP 4 - MAIN CABLE AND SUSPENDER INSTALLATION

The main cable will be pulled from the east end of the SAS bridge, over the tower, and wrapped around the west end before returning back. Suspender cables will be added to lift the roadway decks off the temporary support structure.

Status: Cable installation is pending the erection of the tower and roadway sections.



STEP 5 - WESTBOUND OPENING

The new bridge will first open in the westbound direction pending completion of the Yerba Buena Island Transition Structures. Westbound access to the Skyway from Oakland will be completed by the Oakland Touchdown #1 Contract in 2009.

Status: Westbound opening is scheduled for 2012.



STEP 6 - EASTBOUND OPENING

Opening of the bridge in the eastbound direction is pending completion of Oakland Touchdown 2, which needs westbound traffic off the existing bridge before the eastbound approach structure can be completed.

Status: Eastbound opening is scheduled for 2013.



TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Self-Anchored Suspension (SAS) Superstructure Fabrication Activities

Nearly every component of the SAS above the waterline - from the temporary support structures to the roadway and tower box sections to the main cable and suspender ropes - will be fabricated off-site and erected into place upon arrival in the Bay Area. This project is truly global in nature, with fabrication of the bridge components occurring not only in the United States but around the world, in China, the United Kingdom, Japan, South Korea and other locations.

Roadway and Tower Segments

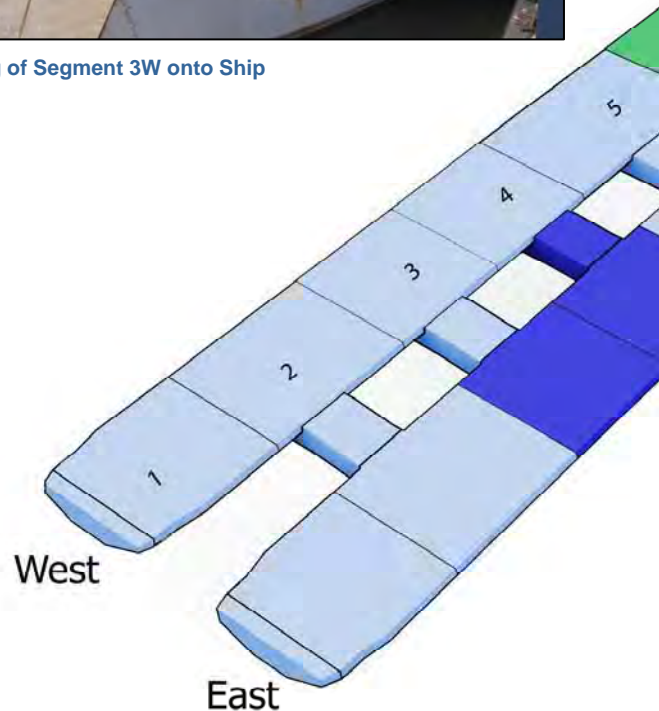
Like giant three-dimensional jigsaw puzzles, the roadway and tower segments of the SAS bridge are hollow steel shells that are internally strengthened and stiffened by a highly engineered network of welded steel ribs and diaphragms. The use of steel in this manner allows for a flexible yet relatively light and strong structure able to withstand the massive loads placed on the bridge during seismic events.

Status: Roadway and tower segments are in various stages of fabrication. Roadway sections 1 through 5 east and west have been assembled for paint and fit up. Sections 1 through 4 will be the first shipment sent and are currently being made ready and are being loaded on to the ship. Sections 6 through 10 are undergoing assembly while subassemblies for roadway sections 11 and 12 are being fabricated. Delays in the preparation of shop drawings for the fabrication of the roadway sections 13 and 14 are putting schedule pressure on the westbound opening of the bridge in 2012.

On the tower sections, assembly of the first of five tower lifts is well underway. The second tower lifts have also started to allow for trial fit-up prior to the first lift as per specification (see additional progress photos on pages 74 through 77).

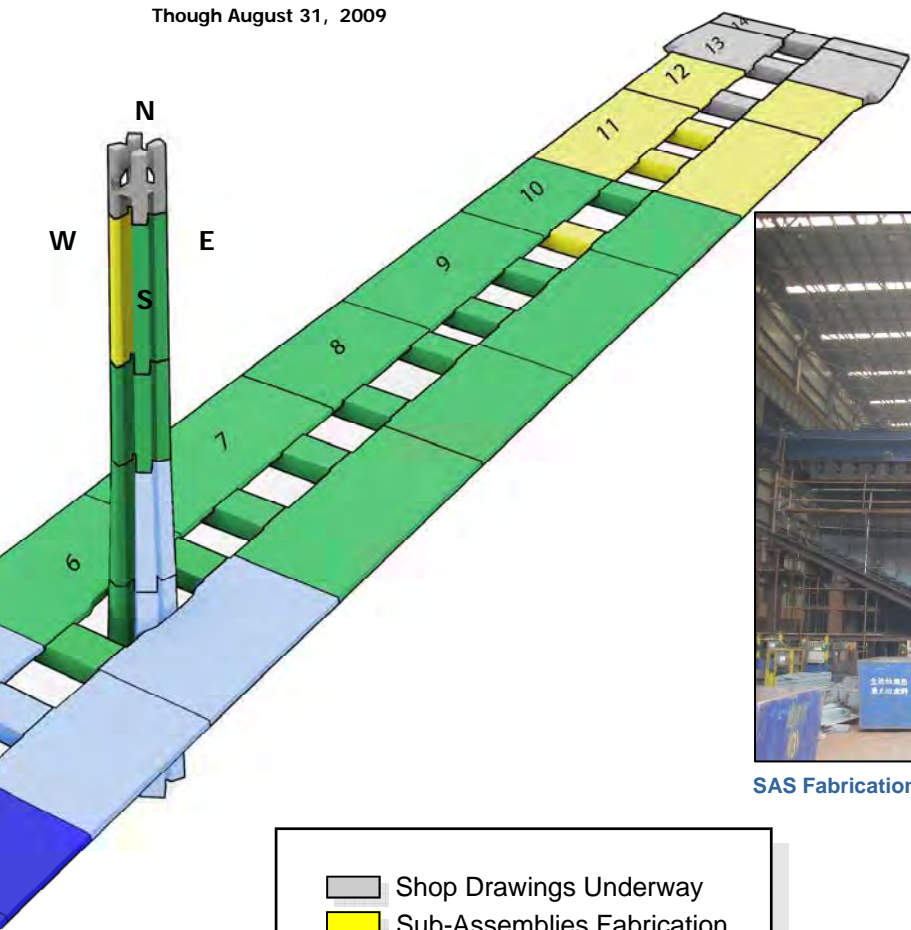


SAS Loading of Segment 3W onto Ship



Fabrication Progress Diagram

Though August 31, 2009

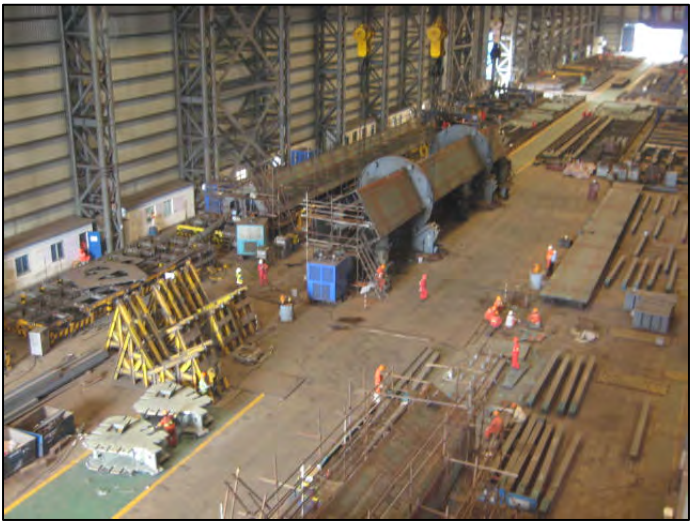


SAS Fabrication of Lift 9 and 10 in Bay 14

- Shop Drawings Underway
- Sub-Assemblies Fabrication
- Segment Assembly
- Blast, Paint & Fit Up
- Ready To Ship



SAS Counterweights Fabrication in Workshop



SAS Overview of Heavy Duty Shop 2

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Self-Anchored Suspension (SAS) Superstructure Fabrication Activities

Cables and Suspenders

One continuous main cable will be used to support the roadway deck of the SAS bridge. Anchored into the eastern end of the bridge, the main cable will start on one side of Pier E2, go over the main tower at T1, loop around the western end of the roadway decks at Pier W2, and then back over main tower to the other end of Pier E2. The main cable will be made up of bundles of individual wire strands. Lifting up the roadway decks to the main cable will be a number of smaller suspender cables. The main cable will be fabricated in China and the suspender cables in Missouri.

Status: Initial trial testing of the main cable strands is in progress.



SAS B14 Cable Band Half, United Kingdom



SAS Service Platform Upper Frame Galvanizing, California

Saddles, Bearings, Hinges, and Other Bridge Components

The mounts on which the main cable and suspender ropes will sit are made from solid steel castings. Castings for the main cable saddles are being made by Japan Steel Works, while the cable bands and brackets are being made by Goodwin Steel in the United Kingdom.

The bridge bearings and hinges that support, connect, and transfer service loads from the SAS bridge to the adjoining sections of the new east span are being fabricated in a number of locations. Work on the bearings is being performed in Pennsylvania and South Korea, while hinge pipe beams are being fabricated in Oregon.

Status: Under Fabrication.

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Self-Anchored Suspension (SAS) Superstructure Field Activities



Shear-Leg Barge Crane

Shear-Leg Barge Crane

The massive shear-leg barge crane that will help build the SAS superstructure arrived in the San Francisco Bay on March 12, 2009 after a trans-pacific voyage.

The crane and barge are separate units operating as a single entity dubbed the "Left Coast Lifter." The 400 by 100-foot barge is a U.S. flagged vessel that was custom built in Portland, Oregon by U.S. Barge, LLC and outfitted with the crane by Shanghai Zhenhua Port Machinery Co. Ltd. (ZPMC) at a facility near Shanghai, China. The crane's boom weighs 992 tons and is 328 feet long. The crane can lift up to 1,873 tons, including the deck and tower sections for the SAS, which will begin arriving this summer.

The crane has off-loaded all temporary trusses shipped to date and has lifted 50 percent of the temporary towers' trusses into place. Work on the eastbound side of the SAS must occur first, as the crane cannot reach over permanent westbound decks to work on the eastbound roadway.

Status: At job site.



SAS View from East of E2

Cap Beams

Construction of the massive steel-reinforced concrete cap beams that link the columns at piers W2 and E2 was left to the SAS superstructure contractor and represents the only concrete portions of work on that contract. The east and west ends of the SAS roadway will rest on the cap beams and the main cable will wrap around and tie down upon them.

Status: Completed.

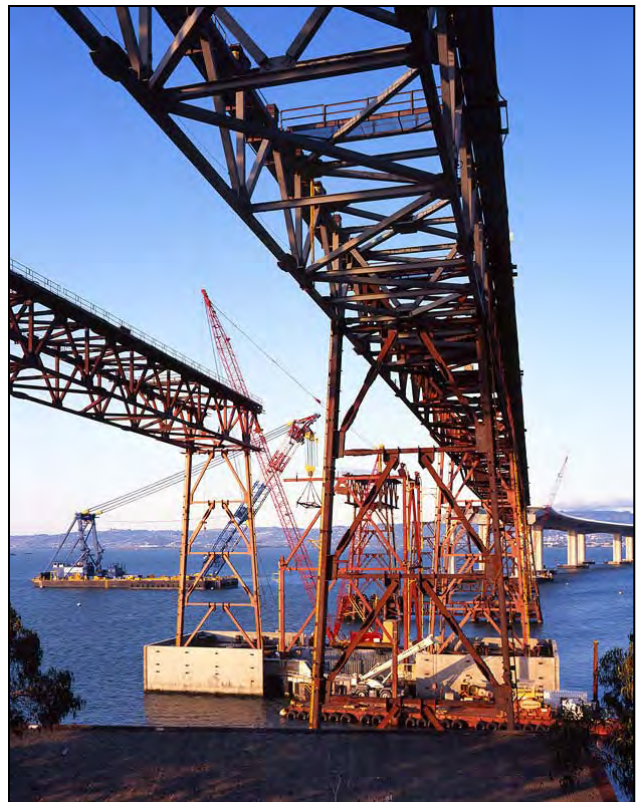
TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Self-Anchored Suspension (SAS) Superstructure Field Activities

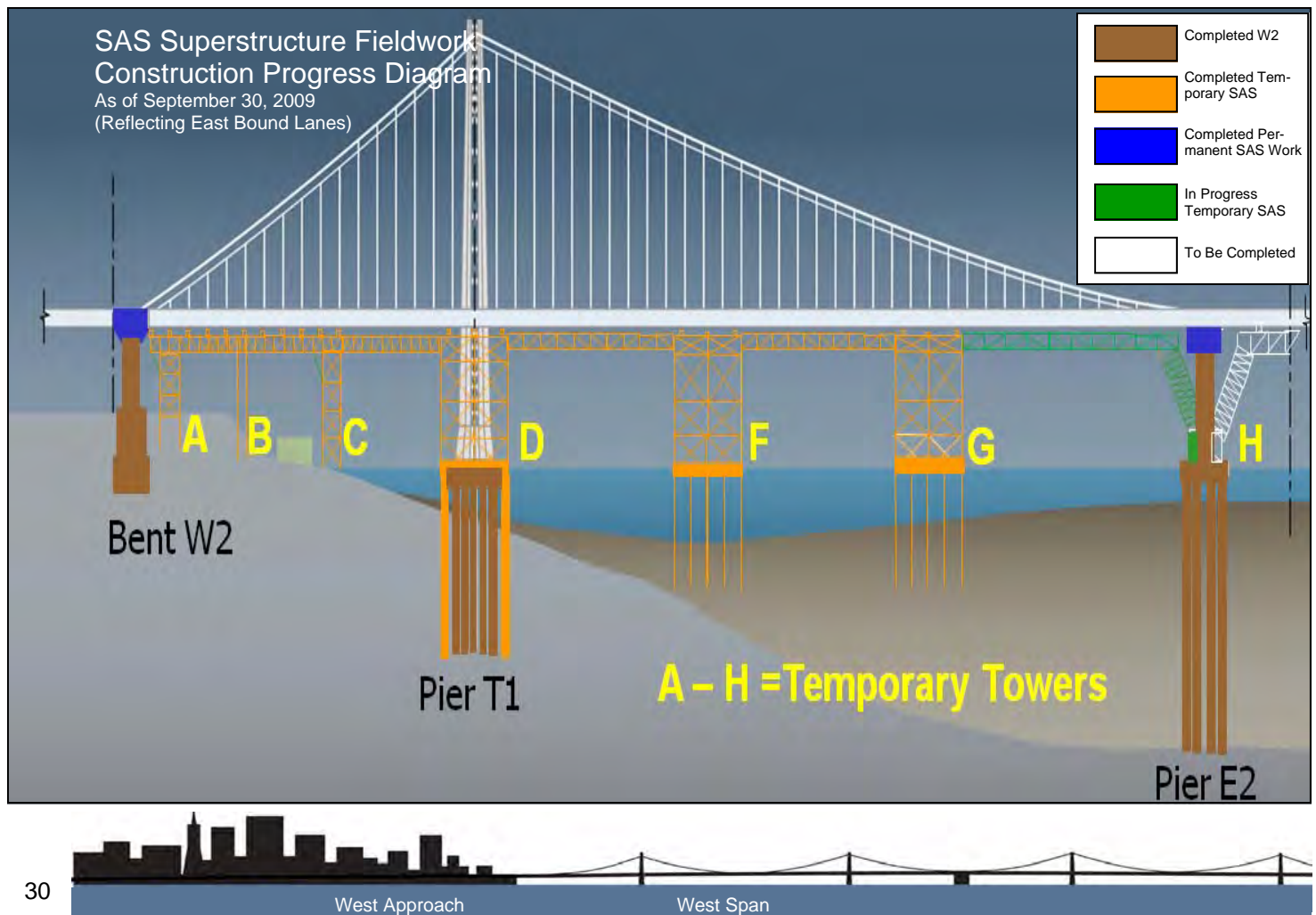
Temporary Support Structures

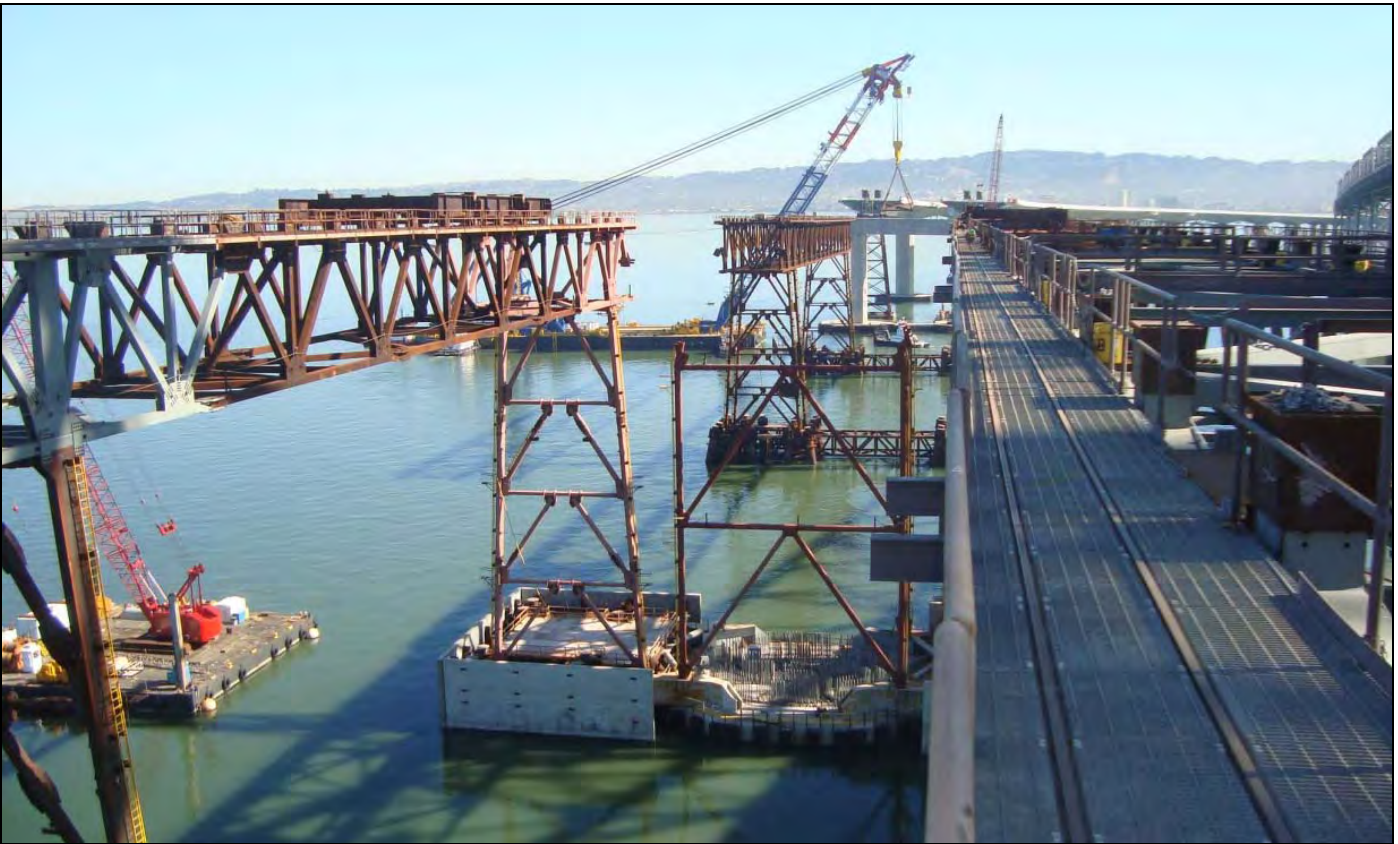
To erect the roadway decks and tower of the bridge, temporary support structures will first be put in place. Almost a bridge in itself, the temporary support structures will stretch from the end of the completed Skyway back to Yerba Buena Island. For the tower, a strand jack system is being built into the tower's temporary frame to elevate the upper sections of the tower into place. These temporary supports are being fabricated in the Bay Area, as well as in Oregon and in China at ZPMC.

Status: The temporary support foundations and six temporary towers have been completed and approximately half of the temporary trusses are in place.



SAS Temporary Truss and Towers Erection East and West Bound





SAS Westbound Temporary Towers and Truss Erection



SAS Splicing of F Truss to G Truss

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Skyway

The Skyway, which comprises much of the new East Span, will drastically change the appearance of the Bay Bridge. Replacing the grey steel that currently cages drivers, a graceful, elevated roadway supported by piers will provide sweeping views of the bay.

E Skyway Contract

Contractor: Kiewit/FCI/Manson Joint Venture

Approved Capital Outlay Budget: \$1,254.1 M

Status: Completed

Extending for more than a mile across Oakland mudflats, the Skyway is the longest section of the East Span. It sits between the new Self-Anchored Suspension (SAS) span and the Oakland Touchdown. In addition to incorporating the latest seismic-safety technology, the side-by-side roadway decks of the Skyway feature shoulders and lane widths built to modern standards.

The Skyway's decks are composed of 452 pre-cast concrete segments (standing three stories high), and contain approximately 200 million pounds of structural steel, 120 million pounds of reinforcing steel, 200 thousand linear feet of piling and about 450 thousand cubic yards of concrete. These are the largest segments of their kind ever cast and were lifted into place by winches that were custom made for this project.

The Skyway marine foundation consists of 160 hollow steel pipe piles measuring eight feet in diameter and dispersed among 14 sets of piers. The 365-ton piles were driven more than 300 feet into the deep bay mud. The new East Span piles were battered or driven in at an angle, rather than vertically, to obtain maximum strength and resistance.

Designed specifically to move during a major earthquake, the Skyway features several state-of-the-art seismic safety innovations, including 60-foot-long hinge pipe beams. These beams will allow deck segments on the Skyway to move, enabling the deck to withstand greater motion and to absorb more earthquake energy.



Completed Skyway Left of Existing East Span



Western End of Completed Skyway



TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Oakland Touchdown

When completed, the Oakland Touchdown (OTD) structures will connect Interstate 80 in Oakland to the new side-by-side decks of the new East Span. For westbound drivers, the OTD will be their introduction to the graceful new East Span. For eastbound drivers from San Francisco, this section of the bridge will carry them from the Skyway to the East Bay offering unobstructed views of the Oakland hills.

The OTD will be constructed through two contracts. The first contract will build the new westbound lanes, as well as part of the eastbound lanes. The second contract to complete the eastbound lanes cannot fully begin until westbound traffic is shifted onto the new bridge so that a portion of the upper deck of the existing bridge can be demolished to allow for a smooth transition for the new eastbound lanes in Oakland.

F Oakland Touchdown #1 Contract

Contractor: MCM Construction, Inc.
Current Capital Outlay Forecast: \$211.8 M
Status: 80% Complete as of August 2009

The OTD #1 contract constructs the entire 1,000-foot-long westbound approach from the toll plaza to the Skyway. When completed, the westbound approach structure will provide direct access to the westbound Skyway. In the eastbound direction, the contract will construct a portion of the eastbound structure and all of the eastbound foundations that are not in conflict with the existing bridge.

Status: On the westbound structure, the contractor has completed all foundation work and is now proceeding with eastbound superstructure work. The contractor MCM re-established temporary construction access to the Skyway structure over the new westbound Oakland Touchdown on August 4th.

G Oakland Touchdown #2 Contract

Contractor: TBD
Current Capital Outlay Forecast: \$64.0 M
Status: In design

The OTD #2 contract will complete the eastbound approach structure from the end of the Skyway to Oakland. This work is critical to the eastbound opening of the new bridge, but cannot be completed until westbound traffic has been shifted off the existing upper deck to the new SAS bridge.



Oakland Touchdown Progress



TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Other Contracts

A number of contracts needed to relocate utilities, clear areas of archeological artifacts, and prepare areas for future work have already been completed. The last major contract will be the eventual demolition and removal of the existing bridge, which by that time will have served the Bay Area for nearly 80 years. Following is a status of some the other East Span contracts.



Archeological Investigations

East Span Interim Seismic Retrofit

Contractors: 1) California Engineering Contractors

2) Balfour Beatty

Approved Capital Outlay Budget: \$30.8 M

Status: Completed

After the 1989 Loma Prieta earthquake, and before the final retrofit strategy was determined for the East Span, Caltrans completed an interim retrofit of the existing bridge to prevent a catastrophic collapse of the bridge should a similar earthquake occur before the East Span was completely replaced. The interim retrofit was performed under two separate contracts that lengthened pier seats, added some structural members, and strengthened areas of the bridge so that they would be more resilient during an earthquake.



Existing East Span of Bay Bridge

Stormwater Treatment Measures

Contractor: Diablo Construction, Inc.

Approved Capital Outlay Budget: \$18.3 M

Status: Completed

The Stormwater Treatment Measures contract implemented a number of best practices for the management and treatment of storm water runoff. Focused on the areas around and approaching the toll plaza, the contract added new drainage and built new bio-retention swales and other related constructs.



Storm Water Retention Basin

Yerba Buena Island Substation

Contractor: West Bay Builders
 Approved Capital Outlay Budget: \$11.6 M
 Status: Completed

This contract relocated an electrical substation just east of the Yerba Buena Island tunnel in preparation for the new East Span.

Pile Installation Demonstration

Contractor: Manson and Dutra, Joint Venture
 Approved Capital Outlay Budget: \$9.2 M
 Status: Completed

While common in offshore drilling, the new East Span is one of the first bridges to use large diameter battered piles in its foundations. To minimize project risks and build industry knowledge, a pile installation demonstration project was initiated to prove the efficacy of the proposed technology and methodology. The demonstration was highly successful and helped result in zero contract change orders or claims for pile driving on the project.

H Existing Bridge Demolition

Contractor: TBD
 Approved Capital Outlay Budget: \$239.2 M
 Status: In Design

Design work on the contract will start in earnest as opening of the new bridge to traffic approaches.



New YBI Electrical Substation

I Electrical Cable Relocation

Contractor: Manson Construction
 Approved Capital Outlay Budget: \$9.6 M
 Status: Completed

A submerged cable from Oakland that is close to where the new bridge will touch down supplies electrical power to Treasure Island. To avoid any possible damage to the cable during construction, two new cables were run from Oakland to Treasure Island to replace the existing cable. The extra cable was funded by the Treasure Island Development Authority and its future development plans.

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Other Completed Projects

The State Legislature in the 1990s identified seven of the nine state-owned toll bridges for seismic retrofit. In addition to the San Francisco-Oakland Bay Bridge, these included the Benicia-Martinez, Carquinez, Richmond-San Rafael and San Mateo-Hayward bridges in the Bay Area, and the Vincent Thomas and Coronado bridges in Southern California. Other than the East Span of the Bay Bridge, the retrofits of all the bridges have been completed as planned.

San Mateo-Hayward Bridge Seismic Retrofit Project

Project Status: Completed 2000

The San Mateo-Hayward Bridge seismic retrofit project focused on the strengthening of the high-rise portion of the span. The foundations of the bridge were significantly upgraded with additional piles.



High-Rise Section of San Mateo-Hayward Bridge

1958 Carquinez Bridge Seismic Retrofit Project

Project Status: Completed 2002

The eastbound 1958 Carquinez Bridge was retrofitted in 2002 with additional reinforcement of the cantilever thru-truss structure.

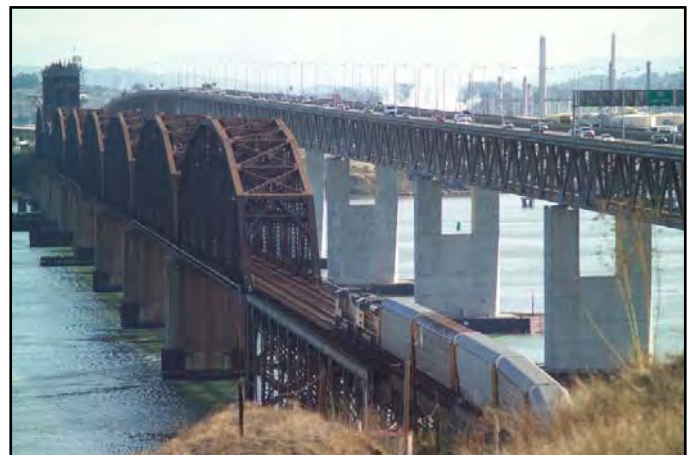


1958 Carquinez Bridge (foreground) with the 1927 Span (middle) under Demolition and the New Alfred Zampa Memorial Bridge (background)

1962 Benicia-Martinez Bridge Seismic Retrofit Project

Project Status: Completed 2003

The southbound 1962 Benicia-Martinez Bridge was retrofitted to “Lifeline” status with the strengthening of the foundations and columns and the addition of seismic bearings that allow the bridge to move during a major seismic event. The Lifeline status means the bridge is designed to sustain minor to moderate damage after an event and to reopen quickly to emergency response traffic.



1962 Benicia Martinez Bridge (right)

Richmond-San Rafael Bridge Seismic Retrofit Project

Project Status: Completed 2005

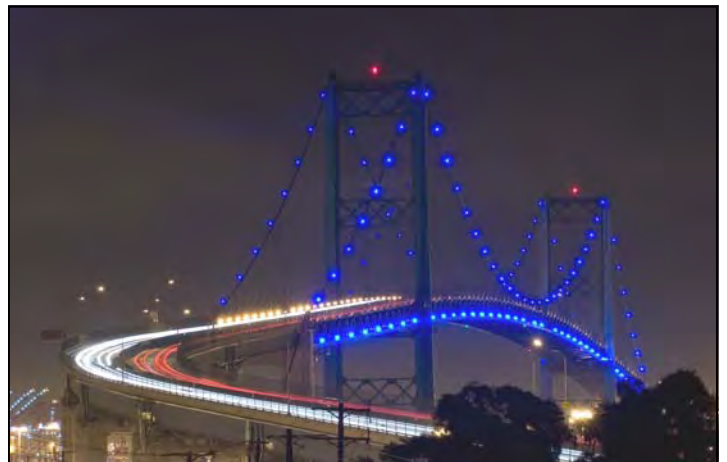
The Richmond-San Rafael Bridge was retrofitted to a “No Collapse” classification to avoid catastrophic failure during a major seismic event. The foundations, columns, and truss of the bridge were strengthened, and the entire low-rise approach viaduct from Marin County was replaced.



Richmond-San Rafael Bridge

Los Angeles-Vincent Thomas Bridge Seismic Retrofit Project

Project Status: Completed 2000



Vincent Thomas Bridge

San Diego-Coronado Bridge Seismic Retrofit Project

Project Status: Completed 2002



San Diego-Coronado Bridge

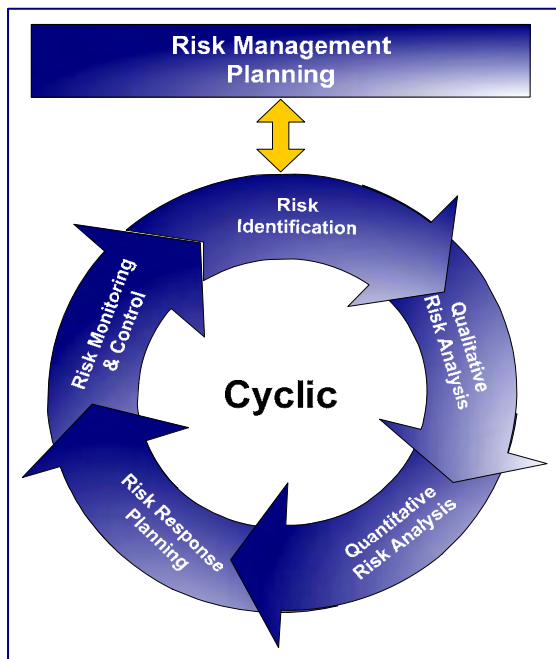
TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Risk Management Program Update

Assembly Bill (AB) 144 states that Caltrans must “regularly reassess its reserves for potential claims and unknown risks, incorporating information related to risks identified and quantified through its risk assessment processes.” AB 144 set a \$900 million Program Reserve (also referred to as the Program Contingency). The Program Contingency is currently at \$689.7 million according to the TBPOC Approved Budget.

The Risk Management Process

Caltrans’ approved risk management plan provides for a systemic and continuous process of identifying, analyzing, and responding to project and program risks. Risk management plan implementation provides



for maximizing the probability and consequences of positive events and minimizing the probability and consequences of adverse events to project objectives (e.g., cost, schedule and quality). Each element of the risk management process is shown in Figure 1 above and is explained in the following paragraphs. The risk management cyclic process is performed on a quarterly basis and encompasses all identified risks related to the contracts, program, corridor, capital outlay, capital outlay support, and schedule.

1. Risk Management Planning – deciding how to approach, plan and execute the risk management activities for the project.
2. Risk Identification – determining which risks might affect the project and documenting their characteristics.
3. Qualitative Risk Analysis – prioritizing risks for subsequent further analysis or action by assessing and combining their probability and impacts.
4. Quantitative Risk Analysis – analyzing numerically the effect of identified risks on overall project objectives.
5. Risk Response Planning – developing options and actions to enhance opportunities and to reduce impact to project objectives.
6. Risk Monitoring and Control – tracking identified risks, monitoring residual risks, identifying new risks, executing risk response plans, and evaluating their effectiveness throughout the project life cycle.

Although the risk management processes above are presented as discreet elements with well-defined interfaces, in practice they often overlap and interact with each other.

What Risk Management Does and Does Not Include

Risk management addresses risks that may affect its defined project objectives such as cost, time, scope and quality. Given a project plan, risk management generally looks at ways in which the project may not go according to plan. Risk management focuses on the defined project scope and objectives, and therefore does not include 1) risks or possible decisions that may “kill” the project -- if the project ceases to exist, there are no risks to manage. For example, risk management does not include risks such as the loss of funding, natural disaster that destroys all or part of the construction or acts of governments, and 2) risks or possible decisions that may materially change the project -- if the project objectives are changed substantially, risk management will start afresh on the “new” project. For example, the YBI Detour contract



East Bound Pushing Cradle

was materially changed by the addition several YBITS1 project foundations by contract change order as well as certain design enhancements that were made to the east and west “tie-ins” of the YBI Detour structure. The risks of such decisions were not in the risk register of the original contract. In a nutshell, risk management is confined to quantifying risks that are intended to be covered by project and program contingency.

About “Risk” and “Opportunity”

The concept of risk can include both upside as well as downside impacts. This means that the word “risk” can be used to describe uncertainties, which if they occurred, would have a negative or harmful effect, and the same word can also describe uncertainties, which if they occurred, would be helpful. In short, there are two sides to risk - threats and opportunities. A risk that has no threat is a “pure opportunity.” It is simply an unplanned good thing which might happen. For example, a new design method might be released, which we can apply to benefit our project. Opportunity is the inverse of threat if a risk has both threat and opportunity. Where a risk variable exists on a continuous scale and there is uncertainty over the eventual outcome, instead of just defining the risk as the downside it might also be possible to consider upside potential. For example, if we have included escalation at 5 percent in our budget for future contracts and this rate could range from say 3 to 7 percent depending on economic conditions at the time

of advertisement, we have an opportunity in the 3 to 5 percent range and a threat in the 5 to 7 percent range. Opportunity and threat exist in the one risk. If the budget were based on 7 percent escalation we would have only opportunity. If based on 3 percent we would have only threat. Threat and opportunity can also depend on how we define the risk. For example, if the risk is that an external agency may relax its requirements and this saves us money relative to what we have budgeted currently in our plan, this is an opportunity. If the risk is defined as the agency may tighten its requirements and this adds to our costs, this is a threat. We can only separate the opportunity and threat if we are certain that the agency may act only one way and not the other. If the risk is that the agency may change its requirements, we could have impacts that range from positive to negative. We would have both opportunity and threat in the same risk, and the degree of each would depend on what we have budgeted in our plan. Uncertainty in the cost of major contract change orders is another example of opportunity. If we enter an estimate into the change order log and the final outcome could range from less than the estimate to more than the estimate, we have both an opportunity and a threat. The degree of opportunity and threat depends on where the estimate lies within the range.

Risk Management for Projects in Design and Construction

Projects in design have the greatest potential for opportunities, because the project is still open to changes. Risk reduction and avoidance are opportunities, as are value analysis, constructability reviews and innovations in design, construction methods and materials. Once a project enters construction, the project objectives (scope, time and cost) are fixed contractually. Any changes are made using a contract change order. The only opportunity to save money or time is from a negative change order such as resulting from a cost reduction incentive proposal by the Contractor. Otherwise, change orders add cost and/or time to the project. So, the prime opportunity during construction is to reduce or eliminate risks.

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Risk Management Program Update (cont.)



SAS W2 Cap Beam

RISK MANAGEMENT DEVELOPMENTS IN THE FIRST QUARTER OF 2009

The approved TBSRP risk management plan provides for reporting quantitative cost risk results and other risk management information from the previous quarter's risk management assessment. Described below are the main risk management developments and updated quantitative cost risk results for the first quarter of 2009.

SAS Contract

Fabrication and OBG and Tower

Caltrans' quality assurance team (Team China), in concert with the Contractor and its fabricator, continues to implement the "Green Tag" procedures that identify and inspect partially fabricated components at the fabrication shop to ensure that they are in compliance with the contract requirements prior to the next stage of fabrication. "Green Tagging" has streamlined the assembly processes and will mitigate delays from potential rework after assembly.

Team China continues to work to mitigate deck and tower fabrication delays reported in the SAS Contractor's latest schedule update. Efforts to create a new opportunity schedule began last quarter and are expected to continue through the next. Potential responses include the implementation of the additional

shop space Contract Change Order (CCO) and the use of shop space intended for other fabricator projects should the opportunity arise. In addition, Team China is assessing the construction of an environmentally controlled temporary shelter to enable work to continue throughout the summer months sheltered from the weather. Work could proceed in multiple shifts to expedite fabrication.

East End Shop Drawings

As discussed in the reports for the third and fourth quarter of 2008, efforts to perform three-dimensional modeling of the east end orthotropic box girder lifts have been undertaken. The modeling has identified conflicts that were resolved or could be resolved prior to fabrication; however, this was only a preliminary step in the development of shop drawings for these elements. The development and approval of shop drawings has yet to be completed.

During this quarter, the urgency of shop drawing development has escalated to a point where it has become one of the most important challenges on the project. To address this, Caltrans, the designer of record, the SAS Contractor, and its detailer have been assessing how to expedite delivery and approval of the shop drawings while maintaining the quality necessary to minimize the passing of risks into fabrication. Actions include the co-location of personnel from all stakeholders to the Contractor detailer's offices in Vancouver, Canada. In addition, methodologies to streamline shop drawing approval and to repackage submittals to coincide with the SAS fabricator's anticipated schedule are expected to be implemented.

SAS Cable Installation

The Cable Focus Team meets weekly to address issues and refine plans. It has retained international experts having expertise and experience in cable installation. The Cable Engineering Risk Management (CERM) Team is scheduled to meet in the second quarter of 2009. Efforts to procure S-Wire samples for the design of the cable wrapping machines have proven fruitful.

SAS Opportunity Schedule

The SAS Contractor's March 2009 schedule update (currently under review by Caltrans) indicates that the certain elements may be as much as 12 months behind the Contractor's original baseline schedule. This schedule update has changed the durations for several activities including extending the time for developing shop drawings and fabricating the east end orthotropic box girder (OBG). The schedule recognizes some opportunities in post-fabrication activities, but does not include all potential delays or opportunities.

Fabrication continues in China. The March 2009 schedule update shows the first shipment of OBG lifts leaving China in July 2009. Team China continues to monitor fabrication and to look for ways to recover time. While an agreement was made last quarter to potentially mitigate six months of delay by accelerating fabrication, the saving is likely to be less than six months. Negotiations are still underway concerning acceleration and resolution of previous fabrication issues. Caltrans and the Contractor have developed a joint opportunity schedule to be used in managing the project with the goal of developing and implementing strategies to accelerate corridor completion.

Yerba Buena Island Detour Contract

East Tie-In

Continuing the collaborative on-site meetings at the different fabrication facilities, Caltrans construction and design personnel, in concert with the Contractor, resolved many issues that might have caused significant delay to the traffic switch schedule. In particular, the subcontractor responsible for the east tie-in bridge moving operation relocated to the designer of record's office in San Francisco for 12 weeks to help resolve all issues with the design of the bridge movement system. Caltrans requires a satisfactory contingency plan from the Contractor before the "roll out/roll in" can commence. The plan is expected to be fully developed in the second quarter of 2009. A full bridge closure is scheduled for the 2009 Labor Day weekend. It is optimal for the corridor construction schedule and presents minimal impact to public traffic. The project management team is looking at the possibility of providing the Contractor a four-day

work window to complete the work. The Risk Management Team will conduct workshops to help guide the decision on the appropriate length of time to allocate for this complex work.

Demolition

The initial cost estimates for completing the demolition (Demo) and the W5 foundation by April 30th, 2010 were reassessed this quarter. Several mitigation options were studied in detail. One option was to extend YBID contract time by several months to complete the Demo without incurring any overtime costs and staging the work to not impact the overall corridor schedule. A second option was to add the Demo and W5 work as an addendum to the YBITS #1 project to bid the work in a competitive environment. The Corridor Schedule Team identified additional schedule risks associated with this option.

The contract risk management team had several meetings to assess the cost/benefits of removing the demolition from the YBID project and bidding this work on the YBITS #1 contract. A matrix of risks was quantified which helped the program management to decide that there was less risk by continuing with this work on the YBID contract.

Traffic Switch

The project management team held regular on-site collaborative workshops with the various fabricators to help resolve design and constructability issues in a timely manner. This open line of communication among the Contractor, its subcontractors, and Caltrans' construction, design and material engineering and testing services allows resources to be assigned to critical areas to mitigate any potential delay prior to its occurrence. In addition, this process has also identified innovative ways to accelerate critical components of the work. In particular, the team identified significant bottlenecks in the fabrication processes for the skid beam and truss, and executed a series of CCOs to help accelerate the work to meet the goal of opening the new detour to traffic in the fall of 2009.

Oakland Touchdown Westbound (OTD #1) Contract

The risk of encountering unknown utilities was reduced this quarter, as all the foundations have been completed with no significant conflicts. Unknown utilities were encountered and conflicts resolved quickly. The cost of future potential conflicts is expected to be low. The risk of conflicting or differing opinions over welding has been reduced this quarter. All production piles are complete, and most non-conformance reports were for minor issues. Remaining work includes welding the bike path rails. The cost of remaining potential welding issues is expected to be very low. The OTD #1 Contractor has been successful in reaching 22 percent small business participation.

West Approach Contract

The West Approach construction contract was accepted April 8th 2009. The probable cost of the risks has diminished by approximately 75 percent from the previous quarter. The reduction is due primarily to the retirement of four risks at the completion of construction.

YBI Transition Structure (YBITS #1) Contract

A risk mitigation plan has been adopted to mitigate potential conflicts between electrical/mechanical and structural elements. This plan provides that Integrated Shop Drawings (ISDs) will be performed as part of design to reduce the likelihood of conflicts and potential costs of rework and/or delays. ISD specifications are being prepared that will require the YBITS1 construction Contractor to produce ISDs that include its own work means and methods, as first order of work.

RISK MANAGEMENT LOOK-AHEAD TO THE 2ND QUARTER OF 2009

SAS: Engage Schedule Partnership

The Corridor Schedule Team continues to assess contract schedules. The opportunity schedule development, which began as a joint effort between Caltrans and the Contractor is continuing with a refocused effort with the goal of developing and implementing strategies to accelerate corridor completion.

SAS: East End Detailing

The east end of the OBG (Lifts 12 – 14) is significantly more complicated than the other lifts due to superelevation transitions, horizontal curves, cable anchorages, hinge diaphragms, etc. In the fourth quarter of 2008, three-dimensional modeling of the area was successful in identifying conflicts and complexity issues. The development of shop drawings is expected to be extremely complicated and will require a coordinated effort by Caltrans' design and construction forces and the Contractor. The Working Drawing Campus Team will continue to engage the Contractor and determine ways to expedite shop drawing reviews and minimize rework.

YBI Detour: Detailed event planning for YBI Detour Traffic Switch

The TBPOC, in consultation with the project risk management team, will decide in the second quarter whether a fourth day will be required for the YBI Detour traffic switch. Event and contingency planning will also be finalized in the second quarter and the planning effort will be commensurate with the planning that went into the 2006 and 2007 bridge closures.

YBITS 1: Project Milestone Evaluation and Integrated Shop Drawings (ISDs)

The YBID Contractor must complete the Demo and Pier W5 construction before the YBITS #1 Contractor commences field work. Potential delays may result if

the YBITS#1 structure is ready for Hinge “K” closure, but the SAS Contractor is not ready to vacate the area. To mitigate potential construction delay risks, the bid open date and other project milestones will be continuously reviewed and assessed based on the actual progress of the YBID and SAS contracts. A decision has been made to perform the YBITS #1 ISDs now to resolve potential electrical-mechanical-structural conflicts and revise the contract plans accordingly.

ADEQUACY OF PROGRAM RESERVE (PROGRAM CONTINGENCY)

Potential Draw on Program Contingency

The risk management process calculates the potential draw on program contingency each quarter based on the total of all risks and the contingencies remaining from the contracts.

Each contract in design has an assigned contingency allowance. A contract in construction has a remaining contingency, which is the difference between its budget and the sum of bid items, state furnished materials, contract change orders and remaining supplemental work. Capital outlay support has no identified contingency allowance. The total of the contingencies is the amount that is available to cover the risks of all contracts, program risks, and capital outlay support risks. The amount by which the sum of all risks exceeds the total of all contingencies represents a potential draw on the Program Contingency (Reserve). As of the end of the first quarter of 2009, the 50 percent probable draw on Program Contingency is \$604 million. The \$689.7 million TBPOC Second Quarter of 2009 Approved Budget Program Contingency is sufficient to cover identified risks to a 95% confidence level. Ongoing risk mitigation actions will continue to be developed and implemented to reduce the potential draw on Program Contingency.

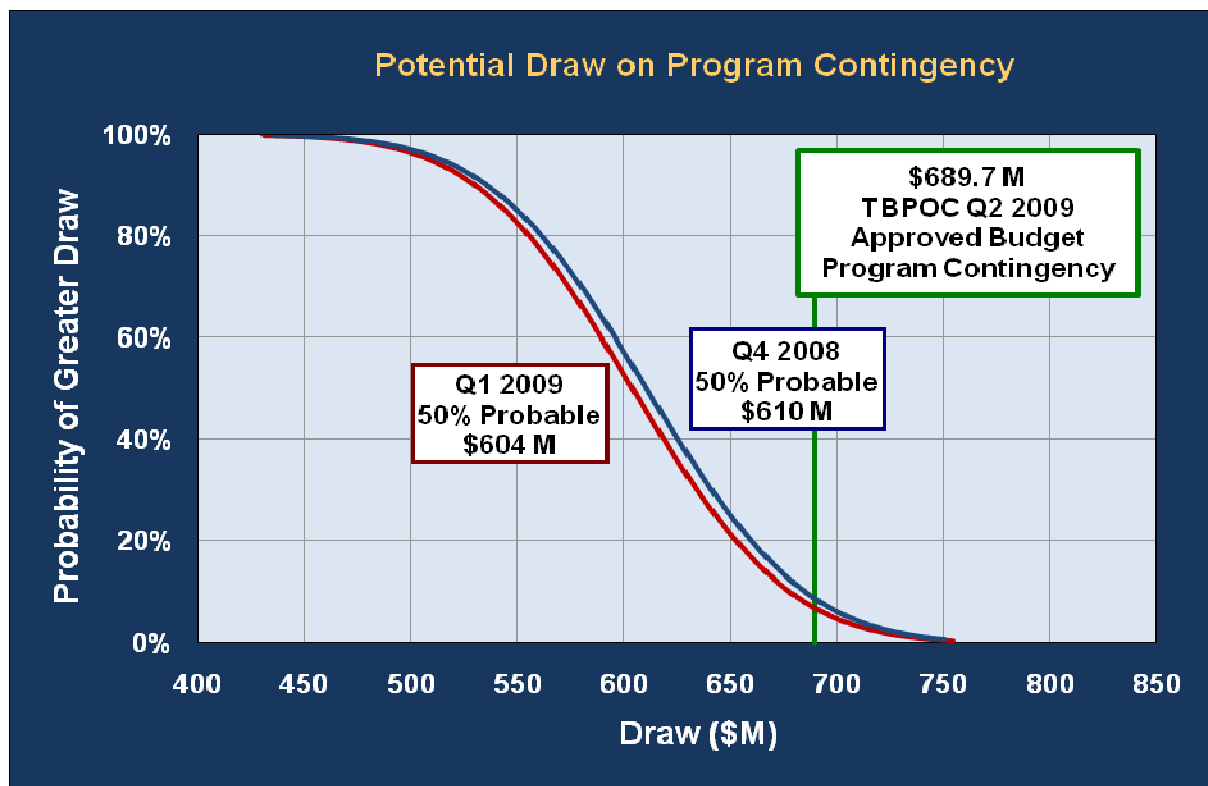
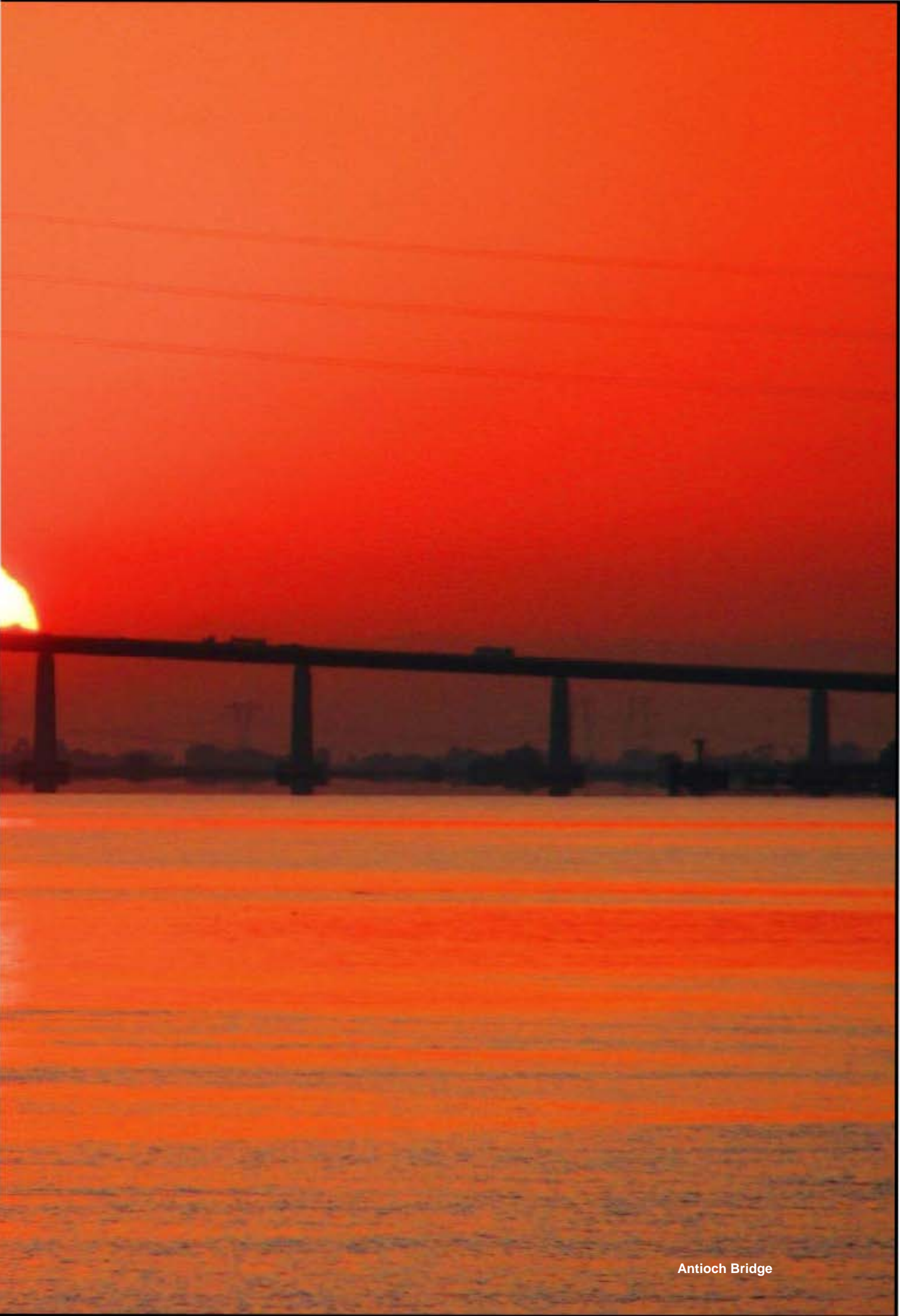


FIGURE 2 – POTENTIAL DRAW ON PROGRAM CONTINGENCY

The curve in Figure 2 can be used to directly read off the probability of exceeding any value of cost. For example, there is about an 80 percent chance that the potential draw on Program Contingency (Reserve) will exceed \$560 million while there is only about a 20 percent chance that it will exceed \$650 million.





Antioch Bridge

Seismic Retrofit of the Dumbarton and Antioch Bridges

SEISMIC RETROFIT OF DUMBARTON AND ANTIOCH BRIDGES

Dumbarton Bridge Seismic Retrofit Project

Project Status: In Design

The Dumbarton Bridge was opened to traffic in 1982 linking the cities of Newark in Alameda County and East Palo Alto in San Mateo County. The 1.6-mile long bridge carries average daily traffic of nearly 60,000 vehicles over its six lanes and has an eight-foot bicycle/pedestrian lane to the south.

Though located between the San Andreas and Hayward faults, the Dumbarton Bridge was not included in the Toll Bridge Seismic Retrofit Program based on evaluations made in the 1990s that concluded the bridge did not warrant retrofitting. The bridge has since been reevaluated for seismic vulnerability based on more recent seismic engineering, which has shown the bridge to be susceptible to damage from a major earthquake.



Prototype Bearings for the Dumbarton Bridge Seismic Retrofit



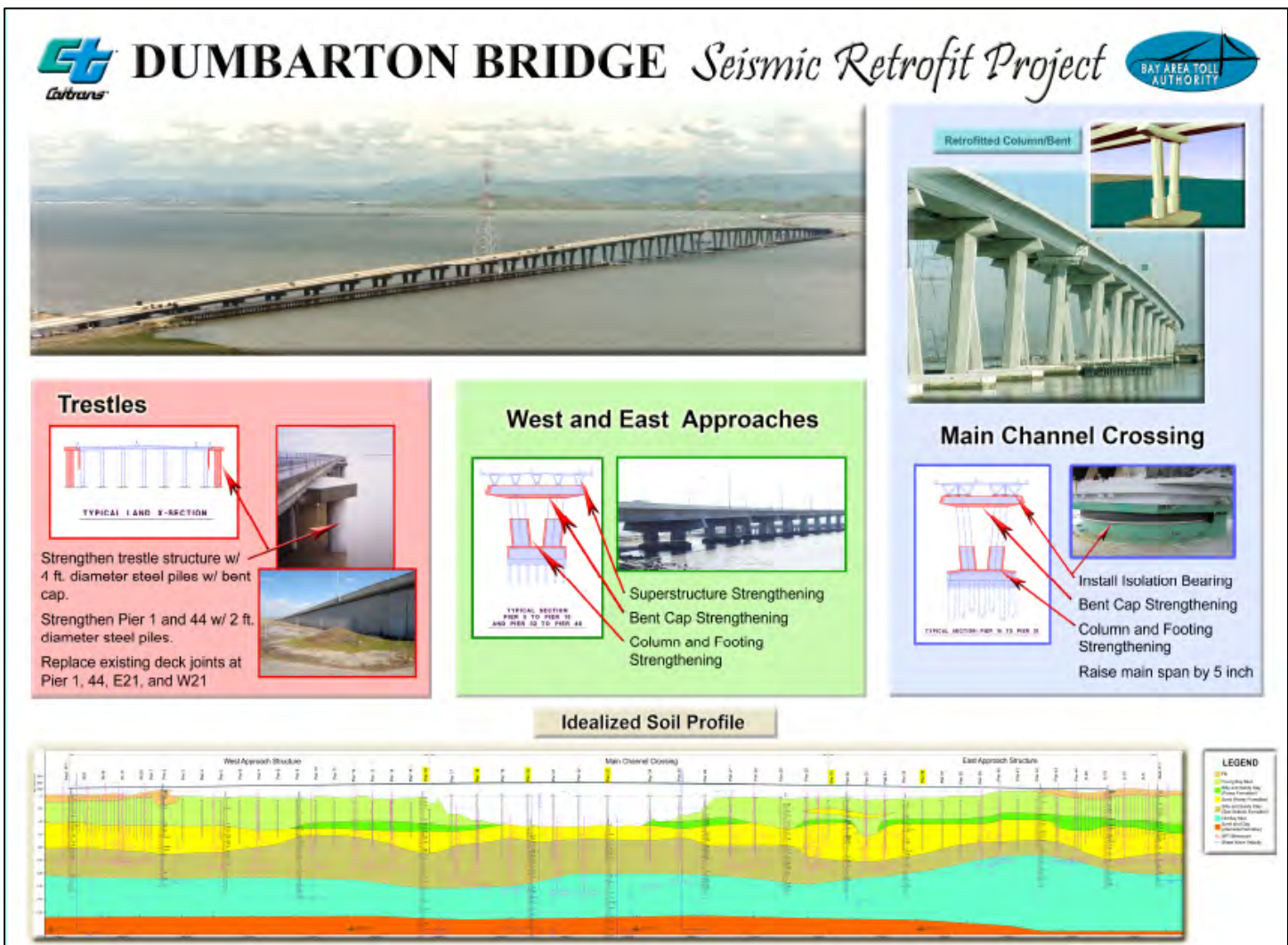
Existing Dumbarton Bridge Looking East towards the Alameda County Foothills

Based on the vulnerability studies and a follow-up sensitivity analysis of seismic risk, Caltrans and BATA decided to take steps towards retrofitting the Dumbarton bridge, even though full funding for the project has not yet been identified. Using BATA toll bridge rehabilitation funding, a comprehensive seismic analysis of the bridge has commenced. This includes detailed geotechnical and geophysical investigations at the bridge and the development of a seismic retrofit strategy and design plans.

The current retrofit strategy for the Dumbarton Bridge includes superstructure and deck modifications, plus strengthening of the over-land approach slab structures. Additional activities are identified in the

attached diagram. The results of the seismic analysis and proposed retrofit strategy have been presented to the Toll Bridge Seismic Safety Peer Review Panel.

Status: Complete plans and specifications are expected by the end of the year. Advertisement of the project is planned for 2010; however, it may be postponed due to delayed environmental permits for the project. The estimated cost of the Dumbarton Bridge seismic retrofit is \$637 million. Full funding for the retrofit work has not yet been identified; however, State Assemblyman Tom Torlakson is sponsoring Assembly Bill 1175 to amend the Toll Bridge Seismic Retrofit Program (TBSRP) to incorporate and fund the Antioch and Dumbarton bridge retrofits. The bill has been forwarded to the governor for signature.



SEISMIC RETROFIT OF DUMBARTON AND ANTIOCH BRIDGES

Antioch Bridge Seismic Retrofit Project

Project Status: In Design

Serving the Delta region of the Bay Area, the Antioch Bridge takes State Route 160 traffic over the San Joaquin River linking eastern Contra Costa County with Sacramento County. The current bridge was opened in 1978 with one lane in each direction and carries an average of over 10,000 vehicles a day. Approximately 1.8 miles long, the bridge is a steel girder support roadway on reinforced concrete columns and foundations.

Like the Dumbarton Bridge, the Antioch bridge was not included in the Toll Bridge Seismic Retrofit Program based on evaluations made in the 1990s that concluded that the bridge did not warrant retrofitting. The Antioch bridge has since been reevaluated for seismic vulnerability based on more recent seismic engineering, which has shown the bridge to be susceptible to damage from a major earthquake.

Based on the vulnerability studies and a follow-up sensitivity analysis of seismic risk, Caltrans and BATA decided to take steps towards the retrofitting the Antioch Bridge, even though full funding for the project has not yet been identified. Using BATA toll bridge rehabilitation funding, a comprehensive seismic analysis of the bridge has commenced. This analysis includes detailed geotechnical and geophysical investigation at the bridge and the development of a seismic retrofit strategy and design plans.

The current retrofit strategy for the Antioch Bridge includes relatively minor modifications to the approach structure on Sherman Island, addition of isolation bearings, strengthening of the columns, and hinge retrofits. The results of the seismic analysis and proposed retrofit strategy have been presented to the Toll Bridge Seismic Safety Peer Review Panel.

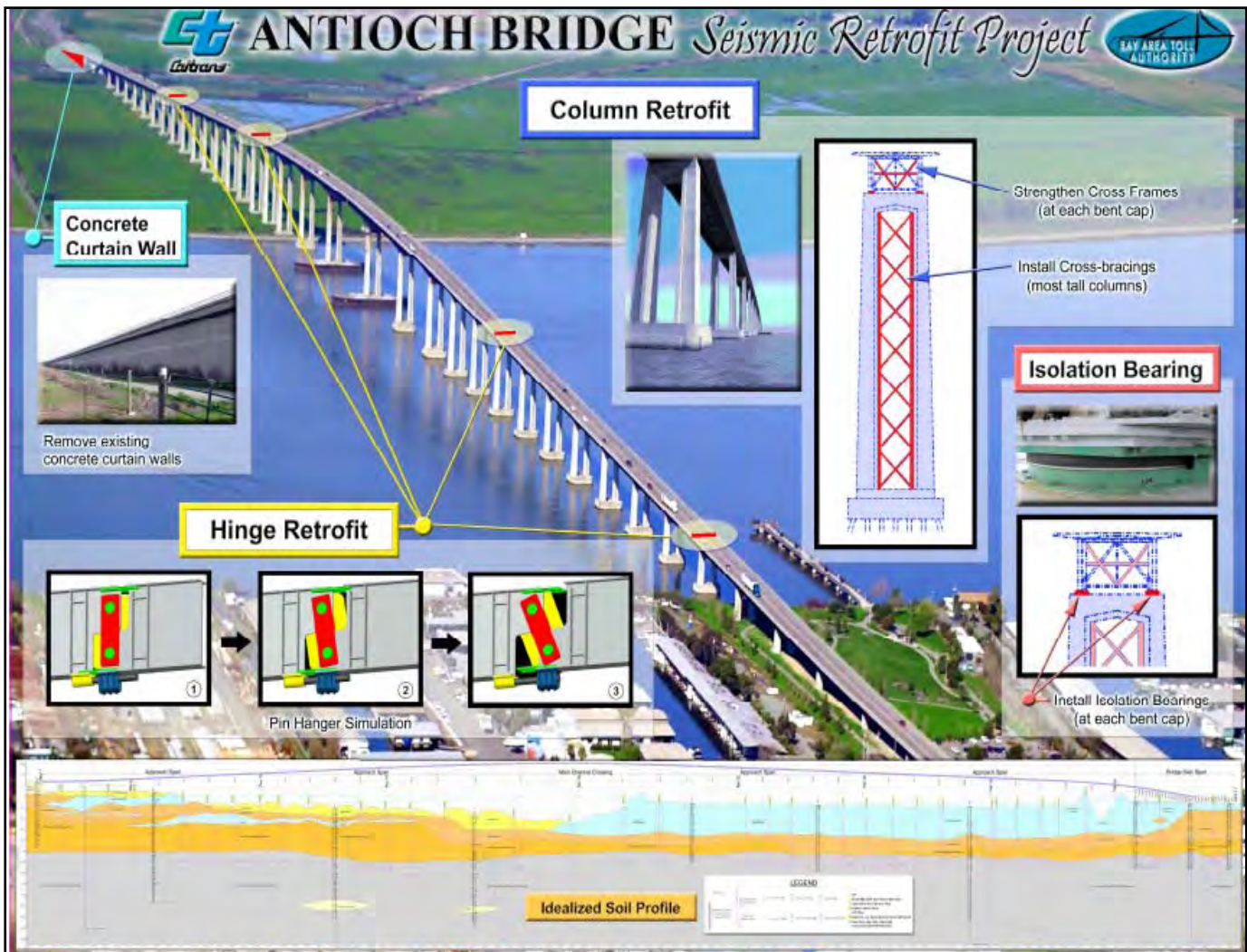


Antioch Bridge

Status: Complete plans and specifications are expected by the end of the year. Advertisement of the project is planned for 2010; however, it may be postponed due to delayed environmental permits for the project. The estimated cost of the Antioch Bridge seismic retrofit is \$313 million. Full funding for the retrofit work has not yet been identified; however, State Assemblyman Tom Torlakson is sponsoring Assembly Bill 1175 to amend the Toll Bridge Seismic Retrofit Program (TBSRP) to incorporate and fund the Antioch and Dumbarton bridge retrofits. The bill has been forwarded to the governor for signature.



Prototype of Bearing for the Antioch Bridge Seismic Retrofit Project



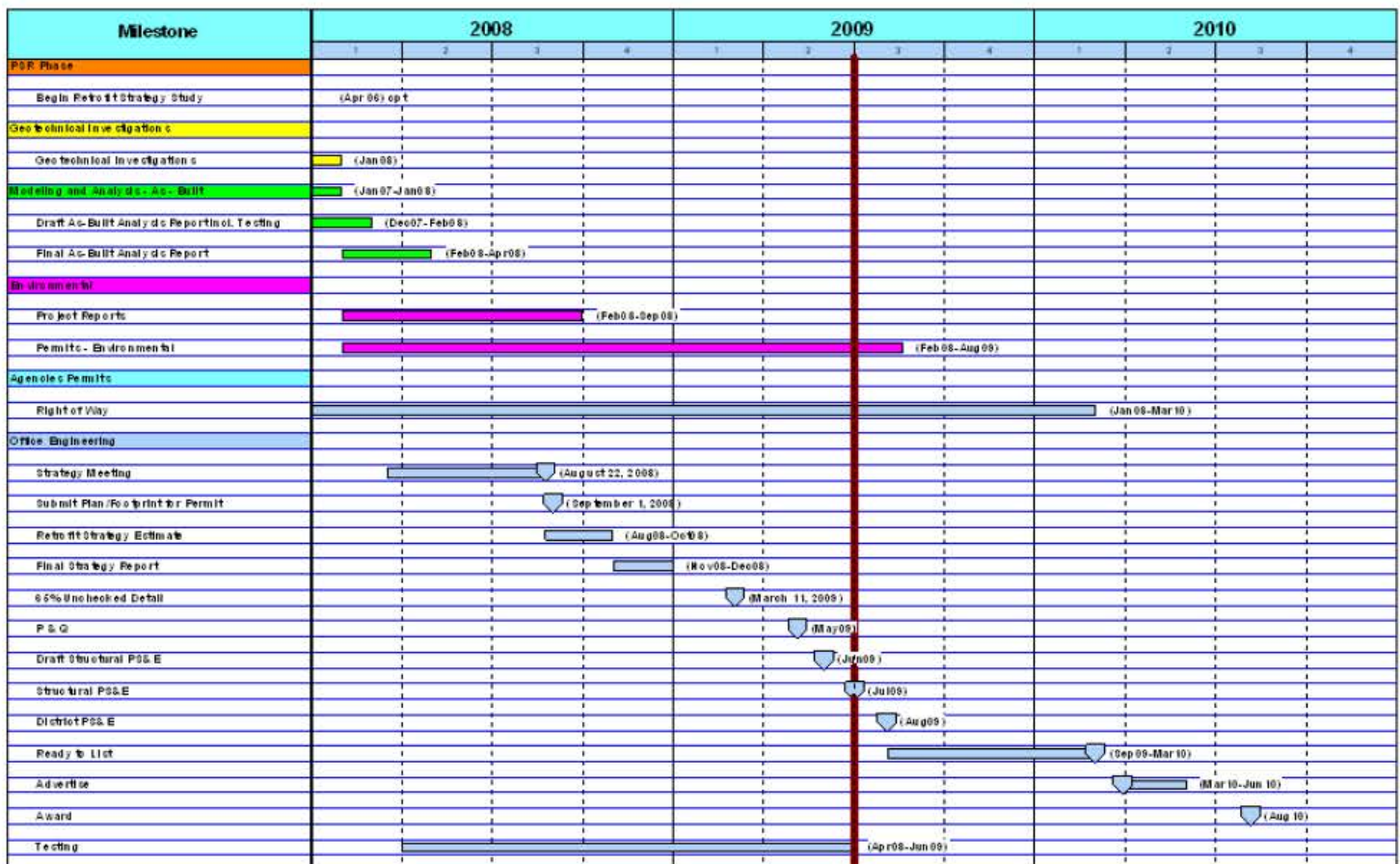
Seismic Retrofit Strategy Summary for Antioch Bridge

Seismic Retrofits of Dumbarton and Antioch Bridges

Project Cost and Schedule Summaries

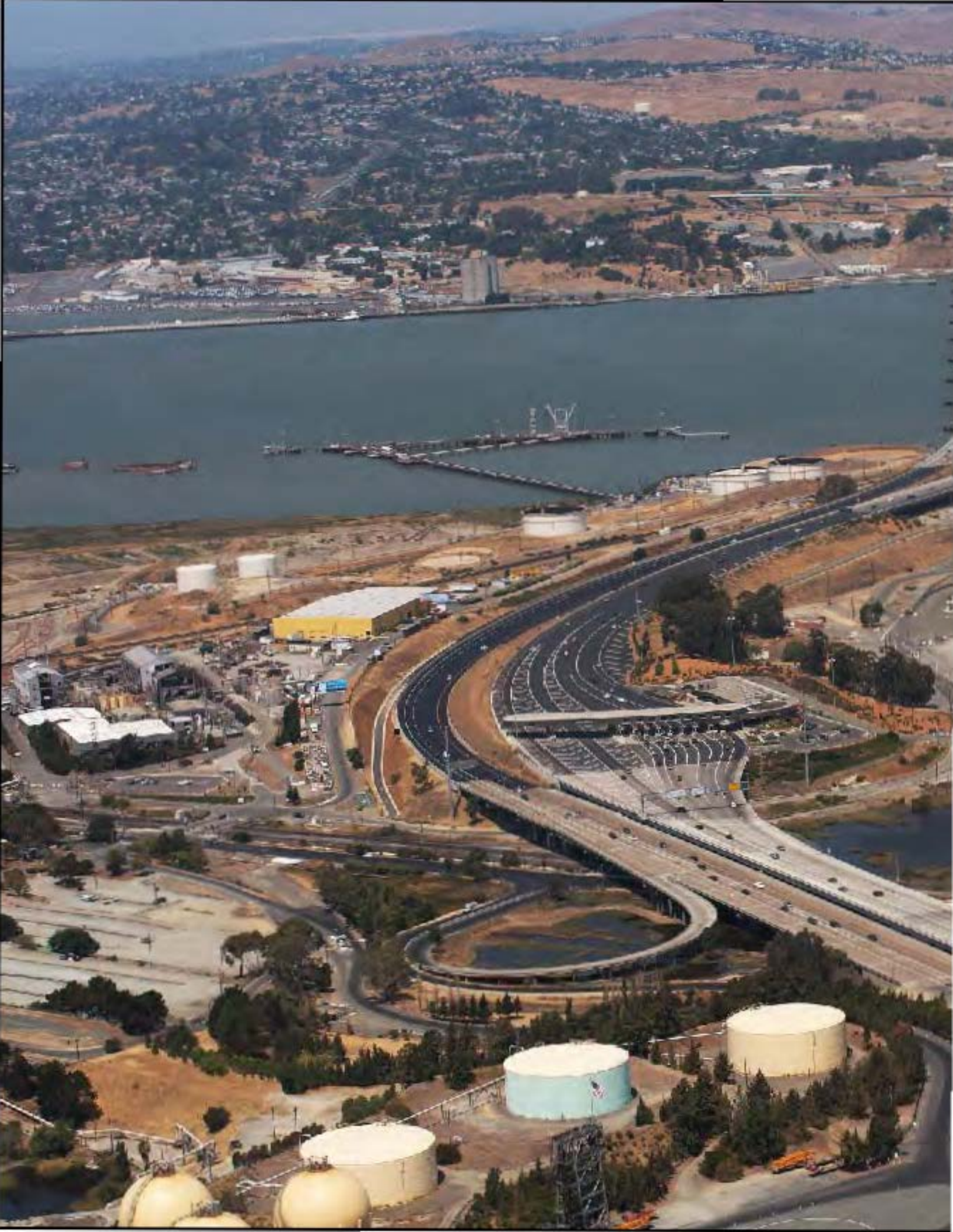
Total Project Estimate - \$950 Million

Description	Antioch (\$ Millions)	Dumbarton (\$ Millions)
CONSTRUCTION COST (ESCALATION TO MID YEAR OF CONSTRUCTION)	\$125	\$267
CONTINGENCIES	44	94
SUBTOTAL CAPITAL COSTS	169	361
SUPPORT COSTS	39	95
MITIGATION COSTS	13	7
RISK COSTS	92	174
TOTAL COST ESTIMATE	\$313	\$637





Dumbarton Bridge





Benicia-Martinez Bridge

REGIONAL MEASURE 1 TOLL BRIDGE PROGRAM

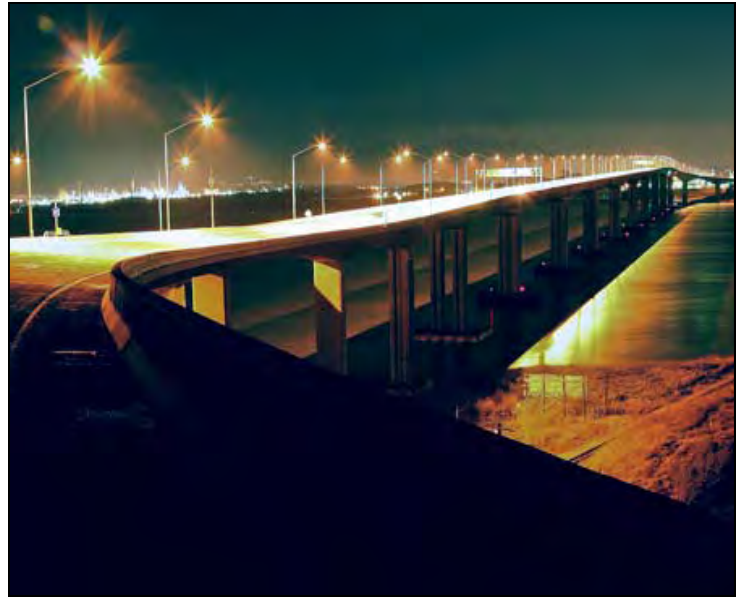
REGIONAL MEASURE 1 PROGRAM

New Benicia-Martinez Bridge Project

Project Status: New Bridge Completed 2007

The new Congressman George Miller Bridge opened to traffic in August 2007 taking its place alongside the existing 1962 Benicia-Martinez Bridge, which is named for Congressman Miller's father, the late George Miller, Jr. The new bridge carries five lanes of northbound Interstate 680 traffic, while the existing bridge is being upgraded to carry four lanes of southbound traffic and a new bicycle/pedestrian pathway.

Decades in the planning and construction, the new bridge is designed to a "Lifeline" seismic design standard, expected to be available for emergency response vehicles soon after a major seismic event. Constructed of lightweight concrete, the structure is one of the longest post-tensioned reinforced cast-in-place concrete bridges in the world. The new toll plaza, relocated from Benicia to Martinez, features the Bay Area's first FasTrak® express lanes, which vastly increase the throughput of vehicles using electronic toll collection.



New Benicia-Martinez Bridge Opened to Traffic in August 2007

1962 Benicia-Martinez Bridge Reconstruction Contract

Contractor: ACC/Top Grade, Joint Venture

Approved Capital Outlay Budget: \$59.5 M

Status: Substantially Complete

A two-year project to rehabilitate and reconfigure the original Benicia-Martinez Bridge began shortly after the opening of the new Congressman George Miller Bridge. The existing 1.2-mile roadway surface on the steel deck truss bridge is being modified to carry four lanes of southbound traffic (one more than before) - with shoulders on both sides - plus a bicycle/pedestrian path on the west side of the span that will connect to Park Road in Benicia and to Marina Vista Boulevard in Martinez.

Stage 1 – Reconstruction of East Side of Bridge and Approaches

Completed in August 2008, this stage involved removal of the old toll plaza on the Benicia side of the bridge, deck repairs on the east side of span, and repair of the roadway undulations on the southern approach just south of the Marina Vista interchange.



Mococo Bridge Jacking

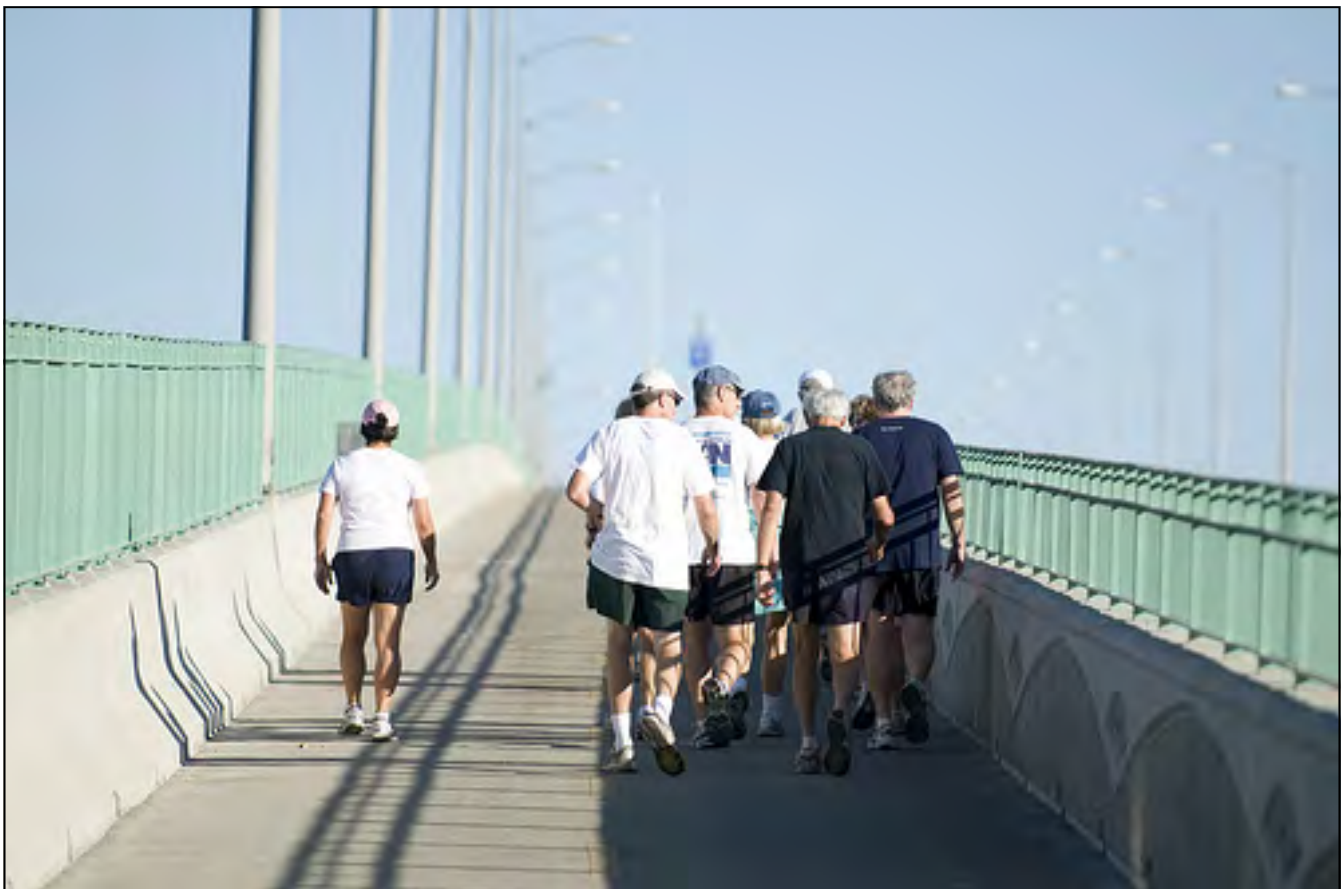
Stage 2 – Reconstruction of West Side of Bridge and Approaches and Construction of Bicycle/Pedestrian Pathway

This stage began after southbound traffic was shifted from the west side of the bridge to the newly refurbished east side. It involves repairing the west side bridge deck, repairing undulations on the west side of the roadway in Martinez, demolishing obsolete I-680/I-780 interchange structures, realigning southbound Interstate 680 for four lanes, and construction of the barrier separating traffic lanes from the bicycle/pedestrian path.

Status: A new southbound I-680 was opened to traffic in early August. The new bicycle/pedestrian path opened on August 29th. The contract is now substantially complete



Benicia-Martinez Bridge pedestrian/Bicycle Pathway Opening Ceremony with Caltrans' District 4 Director Bijan Sartipi



Completed Benicia-Martinez Bicycle/Pedestrian Pathway Open to the Public

REGIONAL MEASURE 1 PROGRAM

Interstate 880/State Route 92 Interchange Reconstruction Project

Project Status: Under Construction

The Interstate 880/State Route 92 Interchange Reconstruction Project is the final project under the Regional Measure 1 Toll Bridge Program. Project completion fulfills a promise made to Bay Area voters in 1988 to deliver a slate of projects that help expand bridge capacity and improve safety on the bridges.

This corridor is consistently one of the Bay Area's most congested during the evening commute. This is due in part to the lane merging and weaving that is required by the existing cloverleaf interchange. The new interchange will feature direct freeway-to-freeway connector ramps that will increase traffic capacity and improve overall safety and traffic operations in the area. With the new direct connector ramps, drivers coming off the San Mateo-Hayward Bridge can access Interstate 880 without having to compete with traffic headed onto east Route 92 from south Interstate 880 (see progress photos on pages 78 and 79).



Future Interstate 880/State Route 92 Interchange (as simulated) Looking West towards San Mateo.

Interstate 880/State Route 92 Interchange Reconstruction Contract

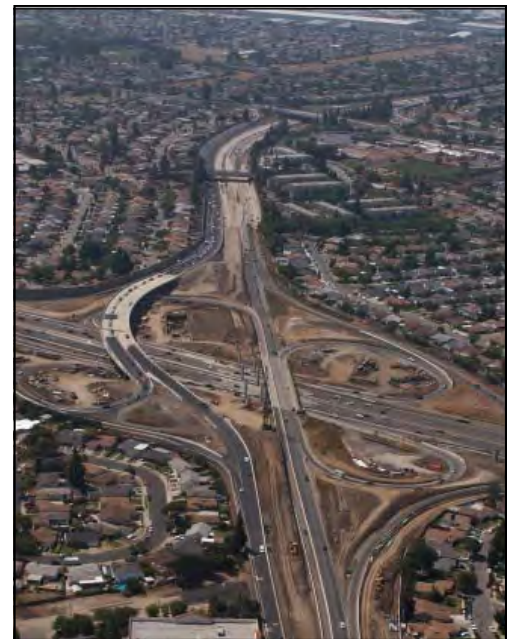
Contractor: Flatiron/Granite

Approved Capital Outlay Budget: \$155.0 M

Status: 52% Complete



Bents 2, 3 and 4 of New Separation Bridge in Place



Overview of Progress to Date

Stage 1 – Construct East Route 92 to North Interstate 880 Connector

The new east Route 92 to north Interstate 880 connector (ENCONN) is the most critical flyover structure for relieving congestion in the corridor. The ENCONN will be first used as a detour to allow for future stages of work, while keeping traffic flowing.

Status: ENCONN was completed and opened to detour traffic on May 16, 2009.

Stage 2 – Replace South Side of Route 92 Separation Structure

By detouring eastbound Route 92 traffic onto ENCONN, the existing separation structure that carries SR-92 over I-880 can be replaced. The existing structure will be cut lengthwise, and then demolished and replaced separately. In this stage, the south side of the structure will be replaced, while west Route 92 and south Interstate 880 to east Route 92 traffic will stay on the remaining structure.

Status: Work on the south side of the separation structure has begun. Foundations and columns have been installed.

Stage 3 – Replace North Side of Route 92 Separation Structure

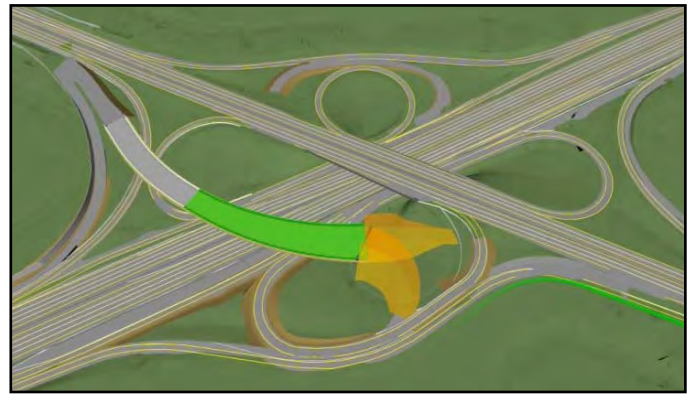
Upon completion of Stage 2, the existing north side of the separation structure will be demolished and replaced. Its traffic will then be shifted onto the newly reconstructed south side.

Status: Pending Stage 2.

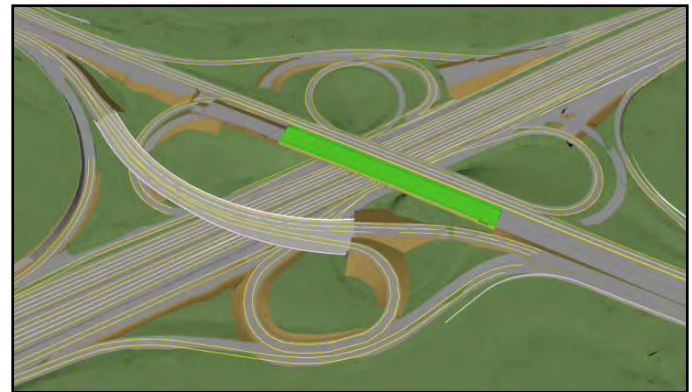
Stage 4 – Final Realignment and Other Work

Upon completion of the Route 92 separation structure, east Route 92 traffic can be shifted onto its permanent alignment from the new ENCONN and directly under the new separation structure. Along with the ENCONN and Route 92 separation structures, several soundwalls, a pedestrian overcrossing on I-880 at Eldridge Avenue and other ramps and structures will also be reconstructed as part of this project.

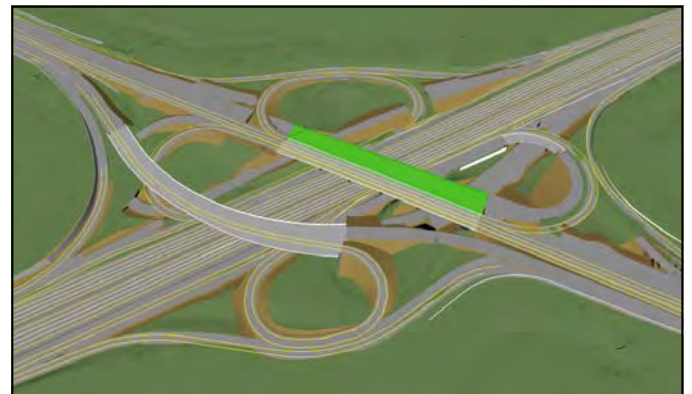
Status: Work continues on walls in the northwest (stage 2), southeast and northeast quadrants, as well as on the Eldridge Ave. pedestrian overcrossing. The new pump station is ongoing and scheduled to be completed in February 2010. The Calaroga Bridge is 50% complete.



Stage 1 - Construct East Route 92 to North Interstate 880 Direct Connector



Stage 2 - Demolish and Replace South Side of Route 92 Separation Structure



Stage 3 - Demolish and Replace North Side of Route 92 Separation Structure



Stage 4 - Final Realignment and Other Work

REGIONAL MEASURE 1 PROGRAM

Other Completed Projects

San Mateo-Hayward Bridge Widening Project

Project Status: Completed 2003



This project expanded the low-rise concrete trestle section of the San Mateo-Hayward Bridge to allow for three lanes in each direction to match the existing configuration of the high-rise steel section of bridge.

Widening of the San Mateo-Hayward Bridge Trestle on Left

Richmond-San Rafael Bridge Rehabilitation Projects

Project Status: Completed 2006

Two major rehabilitation projects for the Richmond-San Rafael Bridge were funded and completed:

- (1) replacement of the western concrete approach trestle and ship-collision protection fender system; and
- (2) rehabilitation of deck joints and resurfacing of the bridge deck.

In 2005, along with the seismic retrofit of the bridge, the trestle and fender replacement work was completed as part of the same project. Under a separate contract in 2006, the bridge was resurfaced with a polyester concrete overlay along with the repair of numerous deck joints.



New Richmond-San Rafael Bridge West Approach Trestle under Construction

Richmond Parkway Construction Project

Project Status: Completed 2001

The final connections to the Richmond Parkway from Interstate 580 near the Richmond-San Rafael Bridge were completed in May 2001.



New Alfred Zampa Memorial (Carquinez) Bridge Soon after Opening to Traffic with Crockett Interchange Still under Construction.

New Alfred Zampa Memorial (Carquinez) Bridge Project

Project Status: Completed 2003

The new western span of the Carquinez Bridge, which replaced the original 1927 span, is a twin-towered suspension bridge with three mixed-flow lanes, a new carpool lane, shoulders and a bicycle and pedestrian pathway.

Bayfront Expressway (State Route 84) Widening Project

Project Status: Completed 2004

This project expanded and improved the roadway from the Dumbarton Bridge touchdown to the U.S. 101/Marsh Road interchange by adding additional lanes and turn pockets and improving bicycle and pedestrian access in the area.



Aerial View of Completed Roll-Out/Roll-In of Yerba Buena Island Detour



APPENDICES

A. TBSRP AB144/SB 66 Baseline Budget, Forecasts and Expenditures through July 31, 2009 (A-1 and A-2).....	62
B. TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures Through July 31, 2009	64
C. Regional Measure 1 Program Cost Detail.....	66
D. Yerba Buena Island Transition Structures (YBITS) Advanced Work Project Progress Diagram.....	69
E. Oakland Touchdown (OTD) #1 Program Diagram.....	70
F. Project Photos.....	71
G. Glossary of Terms.....	82

Appendix A-1: TBSRP AB 144/SB 66 Baseline Budget, Forecasts and Expenditures Through August 31, 2009 (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2009)	Cost To Date (08/2009)	Cost Forecast (08/2009)	At-Completion Variance
a	c	d	e = c + d	f	g	h = g - e
SFOBB East Span Replacement Project						
Capital Outlay Support	959.3	-	959.3	760.7	1,203.1	243.8
Capital Outlay Construction	4,492.2	269.4	4,761.6	3,035.9	5,109.1	347.5
Other Budgeted Capital	35.1	(3.3)	31.8	0.7	7.7	(24.1)
Total	5,486.6	266.1	5,752.7	3,797.3	6,319.9	567.2
SFOBB West Approach Replacement						
Capital Outlay Support	120.0	-	120.0	116.5	117.0	(3.0)
Capital Outlay Construction	309.0	41.7	350.7	328.1	340.7	(10.0)
Total	429.0	41.7	470.7	444.6	457.7	(13.0)
SFOBB West Span Retrofit						
Capital Outlay Support	75.0	-	75.0	74.8	75.0	-
Capital Outlay Construction	232.9	-	232.9	227.2	232.9	-
Total	307.9	-	307.9	302.0	307.9	-
Richmond-San Rafael Bridge Retrofit						
Capital Outlay Support	134.0	(7.0)	127.0	126.7	127.0	-
Capital Outlay Construction	780.0	(90.5)	689.5	667.5	689.5	-
Total	914.0	(97.5)	816.5	794.2	816.5	-
Benicia-Martinez Bridge Retrofit						
Capital Outlay Support	38.1	-	38.1	38.1	38.1	-
Capital Outlay Construction	139.7	-	139.7	139.7	139.7	-
Total	177.8	-	177.8	177.8	177.8	-
Carquinez Bridge Retrofit						
Capital Outlay Support	28.7	-	28.7	28.8	28.7	-
Capital Outlay Construction	85.5	-	85.5	85.4	85.5	-
Total	114.2	-	114.2	114.2	114.2	-
San Mateo-Hayward Bridge Retrofit						
Capital Outlay Support	28.1	-	28.1	28.1	28.1	-
Capital Outlay Construction	135.4	-	135.4	135.3	135.4	-
Total	163.5	-	163.5	163.4	163.5	-
Vincent Thomas Bridge Retrofit (Los Angeles)						
Capital Outlay Support	16.4	-	16.4	16.4	16.4	-
Capital Outlay Construction	42.1	-	42.1	42.0	42.1	-
Total	58.5	-	58.5	58.4	58.5	-
San Diego-Coronado Bridge Retrofit						
Capital Outlay Support	33.5	-	33.5	33.2	33.5	-
Capital Outlay Construction	70.0	-	70.0	69.4	70.0	-
Total	103.5	-	103.5	102.6	103.5	-
Subtotal Capital Outlay Support						
	1,433.1	(7.0)	1,426.1	1,223.3	1,666.9	240.8
Subtotal Capital Outlay						
	6,286.8	220.6	6,507.4	4,730.5	6,844.9	337.5
Subtotal Other Budgeted Capital						
	35.1	(3.3)	31.8	0.7	7.7	(24.1)
Miscellaneous Program Costs						
	30.0	-	30.0	24.7	30.0	-
Subtotal Toll Bridge Seismic Retrofit Program						
	7,785.0	210.3	7,995.3	5,979.2	8,549.5	554.2
Programatic Risk						
	-	-	-	-	49.8	49.8
Program Contingency						
	900.0	(210.3)	689.7	-	85.7	(604.0)
Total Toll Bridge Seismic Retrofit Program						
	8,685.0	-	8,685.0	5,979.2	8,685.0	-

Note: Details may not sum to totals due to rounding effects.

Appendix A-2: TBSRP AB 144/SB 66 Baseline Budget, Forecasts and Expenditures Through August 31, 2009 (\$ Millions)

Bridge	Expenditures to date and				
	AB 144 Baseline Budget	TBPOC Current Approved Budget	Encumbrances as of Aug 2009 See Note (1)	Estimated Costs not yet Spent or Encumbered as of Aug 2009	Total Forecast as of Aug 2009
a	b	c	d	e	f = d + e
Other Completed Projects					
Capital Outlay Support	144.9	144.9	144.6	0.3	144.9
Capital Outlay	472.6	472.6	472.6	0.1	472.7
Total	617.5	617.5	617.2	0.4	617.6
Richmond-San Rafael					
Capital Outlay Support	134.0	127.0	126.7	0.3	127.0
Capital Outlay	698.0	689.5	674.2	15.3	689.5
Project Reserves	82.0	-	-	-	-
Total	914.0	816.5	800.9	15.6	816.5
West Span Retrofit					
Capital Outlay Support	75.0	75.0	74.8	0.2	75.0
Capital Outlay	232.9	232.9	232.7	0.2	232.9
Total	307.9	307.9	307.5	0.4	307.9
West Approach					
Capital Outlay Support	120.0	120.0	117.2	(0.2)	117.0
Capital Outlay	309.0	350.7	342.5	(1.8)	340.7
Total	429.0	470.7	459.7	(2.0)	457.7
SFOBB East Span -Skyway					
Capital Outlay Support	197.0	181.0	181.2	(0.1)	181.1
Capital Outlay	1,293.0	1,254.1	1,412.1	(158.0)	1,254.1
Total	1,490.0	1,435.1	1,593.3	(158.1)	1,435.2
SFOBB East Span -SAS- Superstructure					
Capital Outlay Support	214.6	214.6	176.7	236.2	412.9
Capital Outlay	1,753.7	1,753.7	1,649.6	409.0	2,058.6
Total	1,968.3	1,968.3	1,826.3	645.2	2,471.5
SFOBB East Span -SAS- Foundations					
Capital Outlay Support	62.5	41.0	37.6	1.0	38.6
Capital Outlay	339.9	307.3	308.7	(1.4)	307.3
Total	402.4	348.3	346.3	(0.4)	345.9
Small YBI Projects					
Capital Outlay Support	10.6	10.6	10.1	0.5	10.6
Capital Outlay	15.6	15.6	16.6	(0.9)	15.7
Total	26.2	26.2	26.7	(0.4)	26.3
YBI Detour					
Capital Outlay Support	29.5	66.0	72.3	13.2	85.5
Capital Outlay	131.9	492.8	493.1	33.6	526.7
Total	161.4	558.8	565.4	46.8	612.2
YBI - Transition Structures					
Capital Outlay Support	78.7	78.7	16.4	89.1	105.5
Capital Outlay	299.4	276.1	0.1	285.8	285.9
Total	378.1	354.8	16.5	374.9	391.4
Oakland Touchdown					
Capital Outlay Support	74.4	74.4	65.7	29.6	95.3
Capital Outlay	283.8	283.8	218.0	71.8	289.8
Total	358.2	358.2	283.7	101.4	385.1
East Span Other Small Project					
Capital Outlay Support	212.3	213.3	207.7	5.8	213.5
Capital Outlay	170.8	170.8	94.0	52.6	146.6
Total	383.1	384.1	301.7	58.4	360.1
Existing Bridge Demolition					
Capital Outlay Support	79.7	79.7	0.4	59.6	60.0
Capital Outlay	239.2	239.2	-	232.1	232.1
Total	318.9	318.9	0.4	291.7	292.1
Miscellaneous Program Costs	30.0	30.0	28.9	1.1	30.0
Total Capital Outlay Support (2)	1,463.2	1,456.2	1,260.3	436.6	1,696.9
Total Capital Outlay	6,321.8	6,539.1	5,914.2	938.4	6,852.6
Program Total	7,785.0	7,995.3	7,174.5	1,375.0	8,549.5

(1). Funds allocated to project or contract for Capital Outlay and Support needs includes Capital Outlay Support total allocation for FY 06/07.

(2). BSA provided a distribution of program contingency in December 2004 based on Bechtel Infrastructure Corporation input.

This column is subject to revision upon completion of Department's risk assessment update.

(3). Total Capital Outlay Support includes program indirect costs.

Notes: * Budget for Richmond-San Rafael Bridge includes \$16.9 million of deck joint rehabilitation work that is considered to be eligible for seismic retrofit program funding.

Note: Details may not sum to totals due to rounding effects.

Appendix B: TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures Through August 31, 2009 (\$ Millions)

Contract	EA Number	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2009)	Cost To Date (08/2009)	Cost Forecast (08/2009)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
San Francisco-Oakland Bay Bridge							
East Span Replacement Project							
East Span - Skyway	01202X						
Capital Outlay Support		197.0	(16.0)	181.0	181.1	181.1	0.1
Capital Outlay Construction		1,293.0	(38.9)	1,254.1	1,236.9	1,254.1	-
Total		1,490.0	(54.9)	1,435.1	1,418.0	1,435.2	0.1
East Span - SAS E2/T1 Foundations	0120EX						
Capital Outlay Support		52.5	(21.5)	31.0	28.4	28.6	(2.4)
Capital Outlay Construction		313.5	(32.6)	280.9	275.0	280.9	-
Total		366.0	(54.1)	311.9	303.4	309.5	(2.4)
East Span - SAS Superstructure	0120FX						
Capital Outlay Support		214.6	-	214.6	174.0	412.9	198.3
Capital Outlay Construction		1,753.7	-	1,753.7	807.0	2,058.6	304.9
Total		1,968.3	-	1,968.3	981.0	2,471.5	503.2
SAS W2 Foundations	0120CX						
Capital Outlay Support		10.0	-	10.0	9.2	10.0	-
Capital Outlay Construction		26.4	-	26.4	25.8	26.4	-
Total		36.4	-	36.4	35.0	36.4	-
YBI South/South Detour	0120RX						
Capital Outlay Support		29.4	36.6	66.0	69.9	85.5	19.5
Capital Outlay Construction		132.0	360.8	492.8	371.6	526.7	33.9
Total		161.4	397.4	558.8	441.5	612.2	53.4
YBI Transition Structures (see notes below)	0120PX						
Capital Outlay Support		78.7	-	78.7	26.3	105.5	26.8
Capital Outlay Construction		299.3	(23.2)	276.1	-	285.9	9.8
Total		378.0	(23.2)	354.8	26.3	391.4	36.6
* YBI- Transition Structures							
Contract No. 1							
Capital Outlay Support					6.8	65.1	
Capital Outlay Construction					-	223.2	
Total					6.8	288.3	
* YBI- Transition Structures							
Contract No. 2							
Capital Outlay Support					3.1	23.4	
Capital Outlay Construction					-	59.4	
Total					3.1	82.8	
* YBI- Transition Structures							
Contract No. 3 Landscape							
Capital Outlay Support					-	1.0	
Capital Outlay Construction					-	3.3	
Total					-	4.3	
below)	01204X						
Capital Outlay Support		74.4	-	74.4	63.5	95.3	20.9
Capital Outlay Construction		283.8	-	283.8	188.2	289.8	6.0
Total		358.2	-	358.2	251.7	385.1	26.9
* OTD Submarine Cable	0120K4						
Capital Outlay Support					0.9	0.9	
Capital Outlay Construction					7.9	9.6	
Total					8.8	10.5	
* OTD No. 1 (Westbound)	0120L4						
Capital Outlay Support					38.0	50.4	
Capital Outlay Construction					180.3	211.8	
Total					218.3	262.2	
* OTD No. 2 (Eastbound)	0120M4						
Capital Outlay Support					3.9	20.5	
Capital Outlay Construction					-	64.0	
Total					3.9	84.5	
* OTD Electrical Systems	0120N4						
Capital Outlay Support					0.8	1.5	
Capital Outlay Construction					-	4.4	
Total					0.8	5.9	

Notes: YBI Transition Structures and Oakland Touchdown Cost-to-Date and Cost Forecast includes prior-to-split Capital Outlay

Note: Details may not sum to totals due to rounding effects.

Appendix B: TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures Through August 31, 2009 (\$ Millions) (continued)

Contract	EA Number	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2009)	Cost To Date (08/2009)	Cost Forecast (08/2009)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
Existing Bridge Demolition	01209X						
Capital Outlay Support		79.7	-	79.7	0.4	60.0	(19.7)
Capital Outlay Construction		239.2	-	239.2	-	232.1	(7.1)
Total		318.9	-	318.9	0.4	292.1	(26.8)
YBI/SAS Archeology	01207X						
Capital Outlay Support		1.1	-	1.1	1.1	1.1	-
Capital Outlay Construction		1.1	-	1.1	1.1	1.1	-
Total		2.2	-	2.2	2.2	2.2	-
YBI - USCG Road Relocation	0120QX						
Capital Outlay Support		3.0	-	3.0	2.7	3.0	-
Capital Outlay Construction		3.0	-	3.0	2.8	3.0	-
Total		6.0	-	6.0	5.5	6.0	-
YBI - Substation and Viaduct	0120GX						
Capital Outlay Support		6.5	-	6.5	6.4	6.5	-
Capital Outlay Construction		11.6	-	11.6	11.3	11.6	-
Total		18.1	-	18.1	17.7	18.1	-
Oakland Geofill	01205X						
Capital Outlay Support		2.5	-	2.5	2.5	2.5	-
Capital Outlay Construction		8.2	-	8.2	8.2	8.2	-
Total		10.7	-	10.7	10.7	10.7	-
Pile Installation Demonstration Project	01208X						
Capital Outlay Support		1.8	-	1.8	1.8	1.8	-
Capital Outlay Construction		9.2	-	9.2	9.3	9.2	-
Total		11.0	-	11.0	11.1	11.0	-
Stormwater Treatment Measures	0120JX						
Capital Outlay Support		6.0	2.0	8.0	8.1	8.2	0.2
Capital Outlay Construction		15.0	3.3	18.3	16.7	18.3	-
Total		21.0	5.3	26.3	24.8	26.5	0.2
Right-of-Way and Environmental Mitigation	0120X9						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay & Right-of-Way		72.4	-	72.4	51.2	72.4	-
Total		72.4	-	72.4	51.2	72.4	-
Sunk Cost - Existing East Span Retrofit	04343X & 04300X						
Capital Outlay Support		39.5	-	39.5	39.5	39.5	-
Capital Outlay Construction		30.8	-	30.8	30.8	30.8	-
Total		70.3	-	70.3	70.3	70.3	-
Other Capital Outlay Support							
Environmental Phase		97.7	-	97.7	97.7	97.7	-
Pre-Split Project Expenditures		44.9	-	44.9	44.9	44.9	-
Non-project Specific Costs		20.0	(1.0)	19.0	3.2	19.0	-
Total		162.6	(1.0)	161.6	145.8	161.6	-
Subtotal Capital Outlay Support		959.3	-	959.3	760.7	1,203.1	243.8
Subtotal Capital Outlay Construction		4,492.2	269.4	4,761.6	3,035.9	5,109.1	347.5
Other Budgeted Capital		35.1	(3.3)	31.8	0.7	7.7	(24.1)
Total SFOBB East Span Replacement Project		5,486.6	266.1	5,752.7	3,797.3	6,319.9	567.2

Note: Details may not sum to totals due to rounding effects.

Appendix C: Regional Measure 1 Program Cost Detail (\$ Millions)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (08/2009)	Cost To Date (08/2009)	Cost Forecast (08/2009)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
New Benicia-Martinez Bridge Project							
New Bridge	00603_						
Capital Outlay Support							
BATA Funding		84.9	6.9	91.8	91.7	91.8	-
Non-BATA Funding		-	0.1	0.1	0.1	0.1	-
Subtotal		84.9	7.0	91.9	91.8	91.9	-
Capital Outlay Construction							
BATA Funding		661.9	94.6	756.5	753.8	756.5	-
Non-BATA Funding		10.1	-	10.1	10.1	10.1	-
Subtotal		672.0	94.6	766.6	763.9	766.6	-
Total		756.9	101.6	858.5	855.7	858.5	-
I-680/I-780 Interchange Reconstruction							
00606_							
Capital Outlay Support							
BATA Funding		24.9	5.2	30.1	30.1	30.1	-
Non-BATA Funding		1.4	5.2	6.6	6.3	6.6	-
Subtotal		26.3	10.4	36.7	36.4	36.7	-
Capital Outlay Construction							
BATA Funding		54.7	26.9	81.6	77.1	81.6	-
Non-BATA Funding		21.6	-	21.6	21.7	21.6	-
Subtotal		76.3	26.9	103.2	98.8	103.2	-
Total		102.6	37.3	139.9	135.2	139.9	-
I-680/Marina Vista Interchange Reconstruction							
00605_							
Capital Outlay Support		18.3	1.7	20.0	20.0	20.0	-
Capital Outlay Construction		51.5	4.9	56.4	56.1	56.4	-
Total		69.8	6.6	76.4	76.1	76.4	-
New Toll Plaza and Administration Building							
00604_							
Capital Outlay Support		11.9	3.8	15.7	15.7	15.7	-
Capital Outlay Construction		24.3	2.0	26.3	25.1	26.3	-
Total		36.2	5.8	42.0	40.8	42.0	-
Existing Bridge & Interchange Modifications							
0060A_							
Capital Outlay Support							
BATA Funding		4.3	13.5	17.8	17.0	17.8	-
Non-BATA Funding		-	0.9	0.9	0.8	0.9	-
Subtotal		4.3	14.4	18.7	17.8	18.7	-
Capital Outlay Construction							
BATA Funding		17.2	32.8	50.0	33.3	50.0	-
Non-BATA Funding		-	9.5	9.5	-	9.5	-
Subtotal		17.2	42.3	59.5	33.3	59.5	-
Total		21.5	56.7	78.2	51.1	78.2	-
Other Contracts							
See note below							
Capital Outlay Support		11.4	(2.3)	9.1	8.5	9.1	-
Capital Outlay Construction		20.3	3.3	23.6	17.2	23.6	-
Capital Outlay Right-of-Way		20.4	(0.1)	20.3	17.0	20.3	-
Total		52.1	0.9	53.0	42.7	53.0	-
Subtotal BATA Capital Outlay Support		155.7	28.9	184.5	183.0	184.5	-
Subtotal BATA Capital Outlay Construction		829.9	164.5	994.4	962.6	994.4	-
Subtotal Capital Outlay Right-of-Way		20.4	(0.1)	20.3	17.0	20.3	-
Subtotal Non-BATA Capital Outlay Support		1.4	6.2	7.6	7.2	7.6	-
Subtotal Non-BATA Capital Outlay Construction		31.7	9.5	41.2	31.8	41.2	-
Project Reserves		20.8	3.7	24.5	-	24.5	-
Total New Benicia-Martinez Bridge Project		1,059.9	212.7	1,272.5	1,201.6	1,272.5	-

Notes: Includes EA's 00601_, 00603_, 00605_, 00606_, 00608_, 00609_, 0060A_, 0060C_, 0060E_, 0060F_, 0060G_, and 0060H_ and all Project Right-of-Way

Note: Details may not sum to totals due to rounding effects.

Appendix C: Regional Measure 1 Program Cost Detail (\$ Millions) (Continued)

Project a	EA Number b	BATA Budget (07/2005) c	Approved Changes d	Current Approved Budget (08/2009) e = c + d	Cost To Date (08/2009) f	Cost Forecast (08/2009) g	At- Completion Variance h = g - e
Carquinez Bridge Replacement Project							
New Bridge	01301_						
Capital Outlay Support		60.5	(0.3)	60.2	60.2	60.2	-
Capital Outlay Construction		253.3	2.7	256.0	255.9	256.0	-
Total		313.8	2.4	316.2	316.1	316.2	-
Crockett Interchange Reconstruction							
	01305_						
Capital Outlay Support		32.0	(0.1)	31.9	31.9	31.9	-
Capital Outlay Construction		73.9	(1.9)	72.0	71.9	72.0	-
Total		105.9	(2.0)	103.9	103.8	103.9	-
Existing 1927 Bridge Demolition							
	01309_						
Capital Outlay Support		16.1	(0.5)	15.6	15.6	15.6	-
Capital Outlay Construction		35.2	-	35.2	34.8	35.2	-
Total		51.3	(0.5)	50.8	50.4	50.8	-
Other Contracts							
	See note below						
Capital Outlay Support		15.8	1.2	17.0	16.3	17.0	-
Capital Outlay Construction		18.8	(1.2)	17.6	16.2	17.6	-
Capital Outlay Right-of-Way		10.5	(0.1)	10.4	9.9	10.4	-
Total		45.1	(0.1)	45.0	42.4	45.0	-
Subtotal BATA Capital Outlay Support							
		124.4	0.3	124.7	124.0	124.7	-
Subtotal BATA Capital Outlay Construction							
		381.2	(0.4)	380.8	378.8	380.8	-
Subtotal Capital Outlay Right-of-Way							
		10.5	(0.1)	10.4	9.9	10.4	-
Project Reserves							
		12.1	(9.8)	2.3	-	2.3	-
Total Carquinez Bridge Replacement Project							
		528.2	(10.0)	518.2	512.7	518.2	-
Notes: Other Contracts includes EA's 01301_01302_, 01303_, 01304_01305_, 01306_, 01307_, 01308_, 01309_0130A_, 0130C_, 0130D_, 0130F_, 0130G_, 0130H_, 0130J_, 00453_, 00493_, 04700_, 00607_, 2A270_, and 29920_ and all Project Right-of-Way							

Note: Details may not sum to totals due to rounding effects.

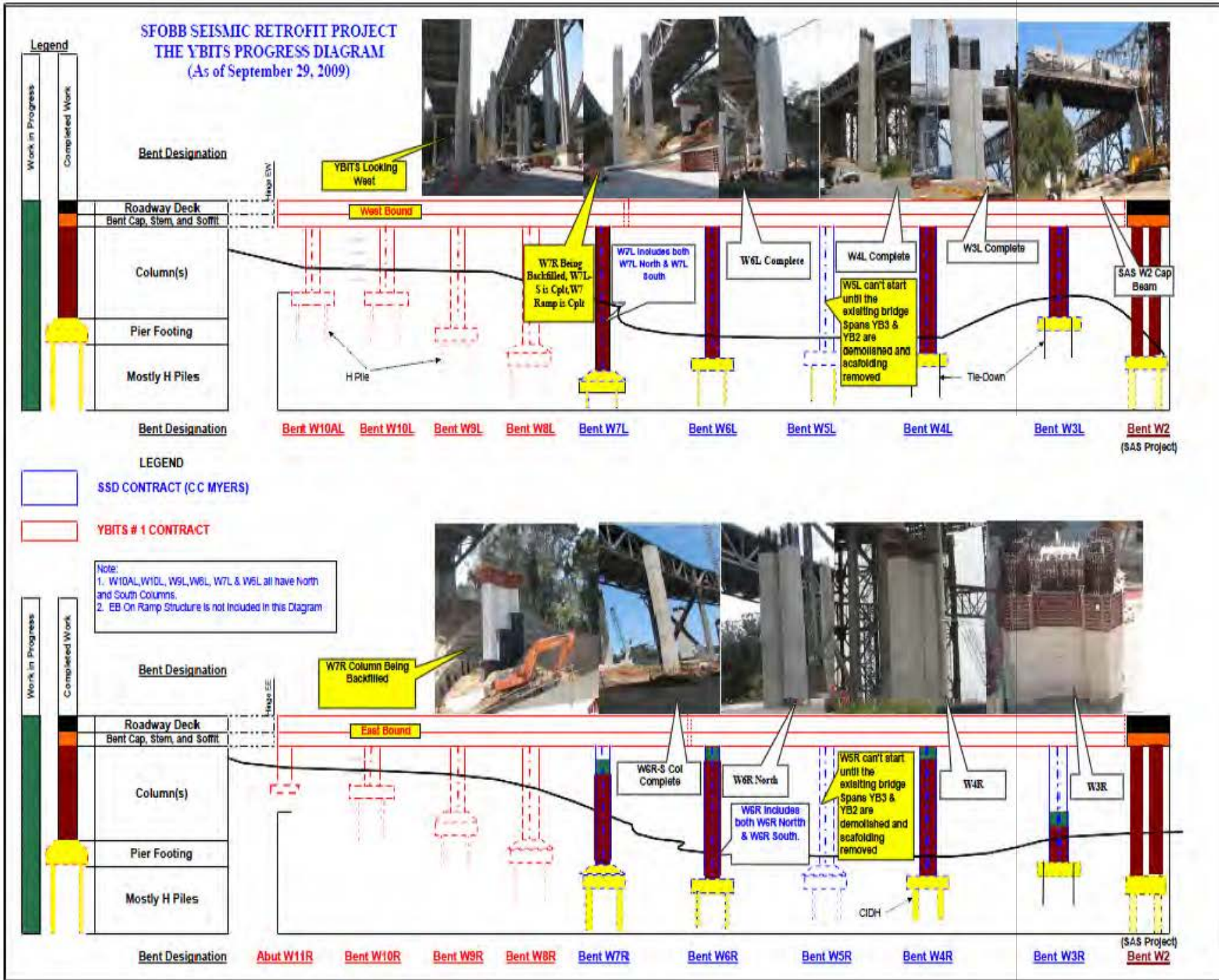
Appendix C: Regional Measure 1 Program Cost Detail (\$ Millions) (Continued)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (08/2009)	Cost To Date (08/2009)	Cost Forecast (08/2009)	At- Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation		See note ¹ below					
Capital Outlay Support							
BATA Funding		2.2	(0.8)	1.4	1.4	1.4	-
Non-BATA Funding		8.6	1.8	10.4	10.4	10.4	-
Subtotal		10.8	1.0	11.8	11.8	11.8	-
Capital Outlay Construction							
BATA Funding		40.2	(6.8)	33.4	33.4	33.4	-
Non-BATA Funding		51.1	-	51.1	51.1	51.1	-
Subtotal		91.3	(6.8)	84.5	84.5	84.5	-
Project Reserves		-	0.8	0.8	-	0.8	-
Total		102.1	(5.0)	97.1	96.3	97.1	-
Rehabilitation		04152_					
Capital Outlay Support							
BATA Funding		4.0	(0.7)	3.3	3.3	3.3	-
Non-BATA Funding		4.0	(4.0)	-	-	-	-
Subtotal		8.0	(4.7)	3.3	3.3	3.3	-
Capital Outlay Construction		16.9	(0.6)	16.3	16.3	16.3	-
Project Reserves		0.1	0.3	0.4	-	0.4	-
Total		25.0	(5.0)	20.0	19.6	20.0	-
Richmond Parkway Project (RM 1 Share Only)		Non-Caltrans					
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay Construction		5.9	-	5.9	4.3	5.9	-
Total		5.9	-	5.9	4.3	5.9	-
San Mateo-Hayward Bridge Widening		See note ² below					
Capital Outlay Support		34.6	(0.5)	34.1	34.1	34.1	-
Capital Outlay Construction		180.2	(6.1)	174.1	174.1	174.1	-
Capital Outlay Right-of-Way		1.5	(0.9)	0.6	0.5	0.6	-
Project Reserves		1.5	(0.5)	1.0	-	1.0	-
Total		217.8	(8.0)	209.8	208.7	209.8	-
I-880/SR-92 Interchange Reconstruction		EA's 23317_, 01601_, and 01602_					
Capital Outlay Support		28.8	34.6	63.4	49.1	63.4	-
Capital Outlay Construction							
BATA Funding		85.2	60.2	145.4	75.2	145.4	-
Non-BATA Funding		9.6	-	9.6	-	9.6	-
Subtotal		94.8	60.2	155.0	75.2	155.0	-
Capital Outlay Right-of-Way		9.9	7.0	16.9	11.8	16.9	-
Project Reserves		0.3	9.4	9.7	-	9.7	-
Total		133.8	111.2	245.0	136.1	245.0	-
Bayfront Expressway Widening		EA's 00487_, 01511_, and 01512_					
Capital Outlay Support		8.6	(0.2)	8.4	8.3	8.4	-
Capital Outlay Construction		26.5	(1.5)	25.0	24.9	25.0	-
Capital Outlay Right-of-Way		0.2	-	0.2	0.2	0.2	-
Project Reserves		0.8	(0.3)	0.5	-	0.5	-
Total		36.1	(2.0)	34.1	33.4	34.1	-
US 101/University Avenue Interchange Modification		Non-Caltrans					
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay Construction		3.8	-	3.8	3.7	3.8	-
Total		3.8	-	3.8	3.7	3.8	-
Subtotal BATA Capital Outlay Support		358.3	61.6	419.8	403.2	419.8	-
Subtotal BATA Capital Outlay Construction		1,569.8	209.3	1,779.1	1,673.3	1,779.1	-
Subtotal Capital Outlay Right-of-Way		42.5	5.9	48.4	39.4	48.4	-
Subtotal Non-BATA Capital Outlay Support		14.0	4.0	18.0	17.6	18.0	-
Subtotal Non-BATA Capital Outlay Construction		92.4	9.5	101.9	82.9	101.9	-
Project Reserves		35.6	3.6	39.2	-	39.2	-
Total RM1 Program		2,112.6	293.9	2,406.4	2,216.4	2,406.4	-

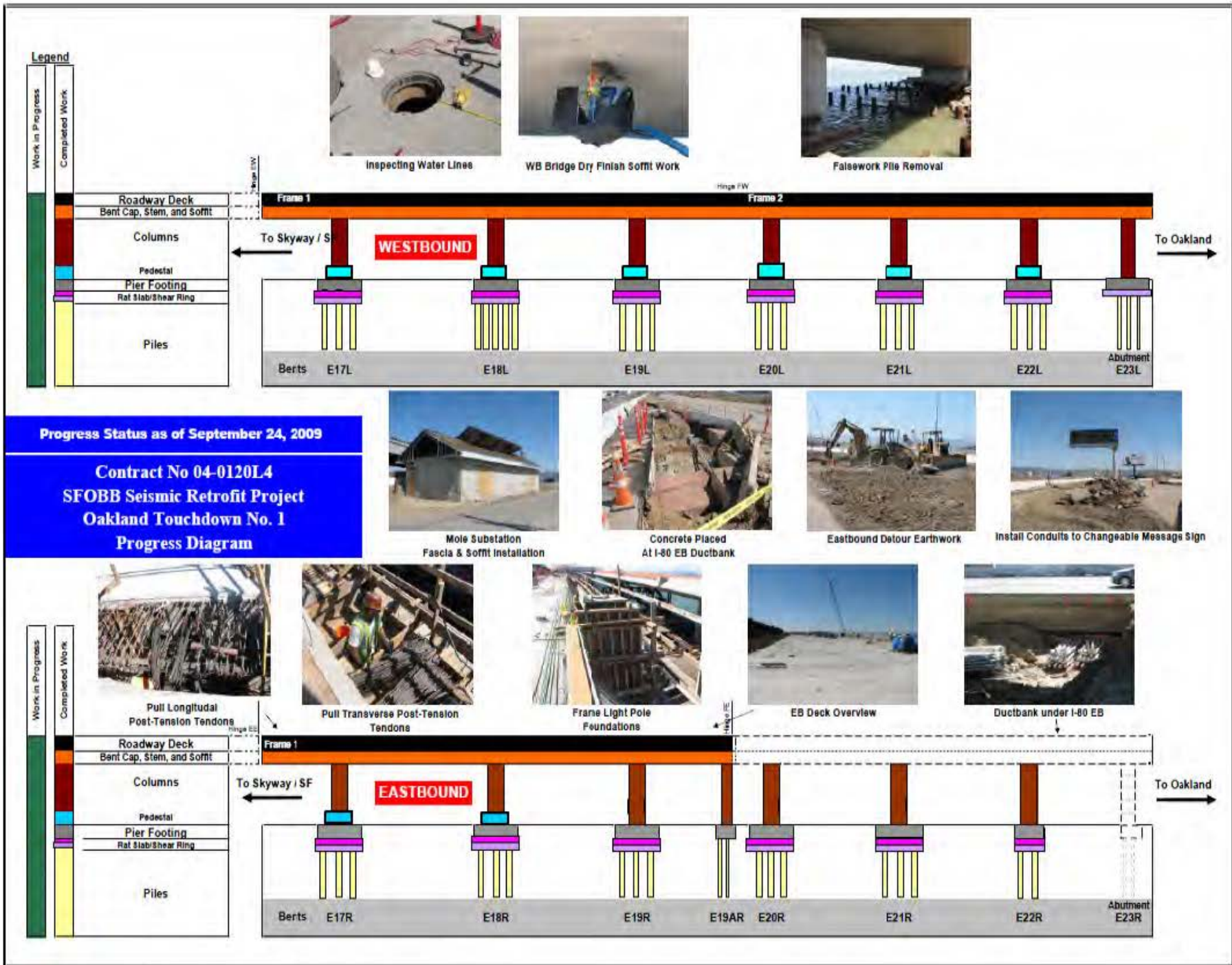
Notes:

¹ Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation Includes Non-TBSRA Expenses for EA 0438U_ and 04157_² San Mateo-Hayward Bridge Widening Includes EA's 00305_, 04501_, 04502_, 04503_, 04504_, 04505_, 04506_, 04507_, 04508_, 04509_, 27740_, 27790_, 04860_

Note: Details may not sum to totals due to rounding effects.



Appendix E: OTD #1 Program Diagram





Appendix F: Project Progress Photographs

Appendix F: Project Progress Photographs

Yerba Buena Island Detour



Yerba Buena Island Existing Bridge Rolled Out Over Gantry



Completed Roll-In/Roll-Out

Appendix F: Project Progress Photographs

Self-Anchored Suspension Bridge Fabrication



CB9 Segment Assembly Being Conducted in Bay 6



NDT and Repairing Being Conducted on the Fillet Welds in Bay 6



Overview of SAS OBG Trial Assembly



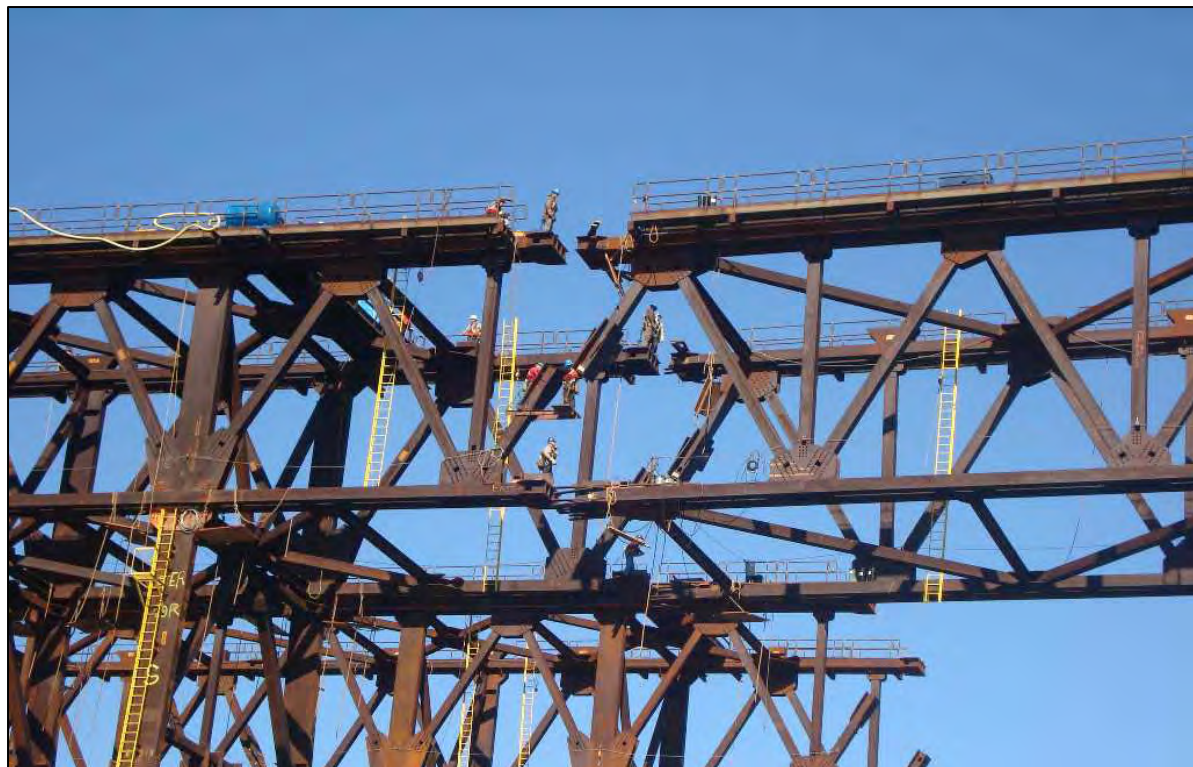
Lift 12 Floorbeam Sub-assembly in Bay 2

Appendix F: Project Progress Photographs

Self-Anchored Suspension Bridge Field Work



Erecting Temporary Truss E Line G to H



Overview of SAS East Jig in Bay 14



SAS Erecting Temporary Truss E line G to H with Left Coast Lifter



SAS Eastbound and Westbound Temporary Towers and Trusses

Appendix F: Project Progress Photographs

Oakland Touchdown



Oakland Touchdown Conduit Bank Excavation for Eastbound



Oakland Touchdown Conduit Installed under the Existing Roadway



Oakland Touchdown Westbound Complete



Oakland Touchdown Mole Substation under Construction

Appendix F: Project Progress Photographs

92/880 Interchange



92/880 Widening at Mount Eden Overhead Crossing



92/880 Pump Station Construction in Progress



92/880 Site Preparation of New Route 92 and Interstate 880 Separator

Appendix G: Glossary of Terms

AB144/SB 66 BUDGET: The planned allocation of resources for the Toll Bridge Seismic Retrofit Program, or subordinate projects or contracts, as provided in Assembly Bill 144 and Senate Bill 66, signed into law by Governor Schwarzenegger on July 18, 2005 and September 29, 2005, respectively.

BATA BUDGET: The planned allocation of resources for the Regional Measure 1 Program, or subordinate projects or contracts as authorized by the Bay Area Toll Authority as of June 2005.

APPROVED CHANGES: For cost, changes to the AB144/SB 66 Budget or BATA Budget as approved by the Bay Area Toll Authority Commission. For schedule, changes to the AB 144/SB 66 Project Complete Baseline approved by the Toll Bridge Program Oversight Committee, or changes to the BATA Project Complete Baseline approved by the Bay Area Toll Authority Commission.

CURRENT APPROVED BUDGET: The sum of the AB144/SB66 Budget or BATA Budget and Approved Changes.

COST TO DATE: The actual expenditures incurred by the program, project or contract as of the month and year shown.

COST FORECAST: The current forecast of all of the costs that are projected to be expended so as to complete the given scope of the program, project, or contract.

AT COMPLETION VARIANCE or VARIANCE (cost): The mathematical difference between the Cost Forecast and the Current Approved Budget.

AB 144/SB 66 PROJECT COMPLETE BASELINE: The planned completion date for the Toll Bridge Seismic Retrofit Program or subordinate projects or contracts.

BATA PROJECT COMPLETE BASELINE: The planned completion date for the Regional Measure 1 Program or subordinate projects or contracts.

PROJECT COMPLETE CURRENT APPROVED SCHEDULE: The sum of the AB144/SB66 Project Complete Baseline or BATA Project Complete Baseline and Approved Changes.

PROJECT COMPLETE SCHEDULE FORECAST: The current projected date for the completion of the program, project, or contract.

SCHEDULE VARIANCE or VARIANCE (schedule): The mathematical difference expressed in months between the Project Complete Schedule Forecast and the Project Complete Current Approved Schedule.

% COMPLETE: % Complete is based on an evaluation of progress on the project, expenditures to date, and schedule.

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** October 8, 2009

FR: Jon Tapping, SFOBB Project Risk Management Coordinator, Caltrans

RE: Agenda No. - 5a
Program Issues
Item- Risk Management Update

Recommendation:

For Information Only

Cost:

N/A

Schedule Impacts:

N/A

Discussion:

A PowerPoint presentation summarizing recent developments in the TBSRP Risk Management Program will be given at the TBPOC October 16, 2009 meeting. The presentation will cover three main topics:

1. The Risk Management Program has evolved to a very advanced, state-of-the-art program that has attracted considerable interest. The presentation will highlight some of the achievements.
2. Summary of Q2 2009 Risk Management results, focusing on the potential draw on Program Contingency and schedule risks and opportunities.
3. Look-ahead from a risk management perspective; emphasis on forecast and opportunities.

Attachment(s):

TBSRP Risk Management Report, 2nd Quarter, 2009

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Risk Management Report

2nd Quarter 2009



Memorandum

*Flex your power!
Be energy efficient!*

To: TONY ANZIANO
Program Manager
Toll Bridge Program

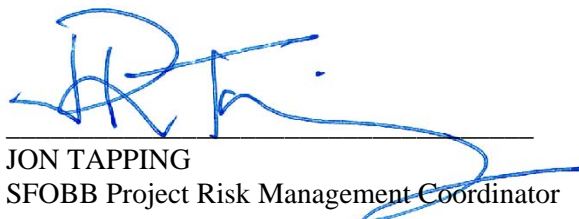
Date: July 31, 2009

From: JON TAPPING
SFOBB Project Risk Management Coordinator

Subject: Second Quarter 2009 Risk Management Report – Toll Bridge Seismic Retrofit Program

With the concurrence of the Toll Bridge Seismic Retrofit Program (TBSRP) Project Manager, I submit for your approval the Second Quarter 2009 Quarterly Risk Management Report (QRM) for the Toll Bridge Seismic Retrofit Program, reporting for the quarter ending June 30, 2009.

Recommend Approval:

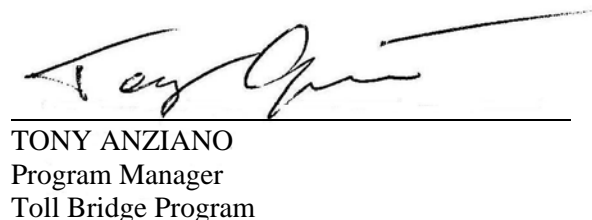


JON TAPPING
SFOBB Project Risk Management Coordinator



KEN TERPSTRA
Project Manager
SFOBB East Span and West Approach

Approved:



TONY ANZIANO
Program Manager
Toll Bridge Program

Copies to:

R. Iwasaki	Director
R. Land	Chief Engineer
C. McKim	Chief Financial Officer
R. Pieplow	Chief, Division of Engineering Services
M. Leja	Chief, Division of Construction

S. Heminger	MTC/BATA Executive Director
J. Barna	CTC Executive Director
A. Fremier	Project Management Team (BATA)
S. Maller	Project Management Team (CTC)



TOLL BRIDGE SEISMIC RETROFIT PROGRAM

RISK MANAGEMENT REPORT

2nd Quarter 2009

June 30, 2009

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Prepared by CALTROP Corporation

Table of Contents

1	INTRODUCTION	1
2	HIGHLIGHTS	2
2.1	SELF-ANCHORED SUSPENSION (SAS) CONTRACT	2
2.2	YBI DETOUR CONTRACT	2
2.3	OAKLAND TOUCHDOWN WESTBOUND CONTRACT	3
2.4	YBI TRANSITION STRUCTURES #1 CONTRACT	3
2.5	WEST APPROACH CONTRACT	3
3	POTENTIAL DRAW ON PROGRAM CONTINGENCY	4
3.1	TOTAL CONTINGENCY AND RISK MANAGEMENT COST	4
3.2	POTENTIAL DRAW ON PROGRAM CONTINGENCY	5
3.3	PROGRAM CONTINGENCY TREND	6
4	SAS – SELF ANCHORED SUSPENSION CONTRACT	7
4.1	STATUS	7
4.2	RISK MANAGEMENT ACTIVITIES	7
4.3	RISK MANAGEMENT COST	9
4.4	LOOK AHEAD	11
5	YBI DETOUR CONTRACT	13
5.1	STATUS	13
5.2	RISK MANAGEMENT ACTIVITIES	13
5.3	RISK MANAGEMENT COST	14
5.4	LOOK AHEAD	15
6	OAKLAND TOUCHDOWN #1 (WESTBOUND) CONTRACT	16
6.1	STATUS	16
6.2	RISK MANAGEMENT ACTIVITIES	16
6.3	RISK MANAGEMENT COST	17
6.4	LOOK AHEAD	18
7	OAKLAND TOUCHDOWN #2 (EASTBOUND) CONTRACT	19
7.1	STATUS	19
7.2	RISK MANAGEMENT ACTIVITIES	19
7.3	RISK MANAGEMENT COST	20
7.4	LOOK AHEAD	21
8	YBI TRANSITION STRUCTURES #1 CONTRACT	22
8.1	STATUS	22
8.2	RISK MANAGEMENT ACTIVITIES	22
8.3	RISK MANAGEMENT COST	23
8.4	LOOK AHEAD	24
9	YBI TRANSITION STRUCTURES #2 CONTRACT	25
9.1	STATUS	25
9.2	RISK MANAGEMENT ACTIVITIES	25
9.3	RISK MANAGEMENT COST	25
9.4	LOOK AHEAD	26
10	WEST APPROACH CONTRACT	27
10.1	STATUS	27
10.2	RISK MANAGEMENT ACTIVITIES	27
11	PROGRAM RISKS	28
11.1	RISK MANAGEMENT COST	28
APPENDIX "A"	RISK MANAGEMENT EXPLANATIONS	29
A.1	WHAT RISK MANAGEMENT DOES AND DOES NOT INCLUDE	29
A.2	ABOUT "RISK" AND "OPPORTUNITY"	29
A.3	INTERPRETING RISK CURVES	30

1 INTRODUCTION

Assembly Bill (AB) 144, signed into law on July 18, 2005, authorized the Department of Transportation (Department) to develop and implement an expanded comprehensive risk management plan for the Toll Bridge Seismic Retrofit Program (TBSRP) to augment the established risk management protocols and mitigation measures already in place.

The Quarterly Risk Management Report (QRMR) summarizes risk management for each contract. It includes risk developments in the current quarter, risk management activities, risk management cost (RMC), RMC trend, and a look-ahead to next quarter. The QRMR supports summary risk management information that is included in other TBSRP reports. Among these are the monthly report to the Toll Bridge Program Oversight Committee (TBPOC) and the quarterly TBPOC report to the California Legislature.

2 HIGHLIGHTS

2.1 SELF-ANCHORED SUSPENSION (SAS) CONTRACT

RISK MANAGEMENT COST

The probable cost of SAS risks has decreased by 15 percent during this quarter. This is primarily due to the recognition of the amount of fabrication completed on the OBG and the Tower in China as well as a transfer of costs from the Risk Register to the CCO log as a result of the Department's issuance of Contract Change Order 108 and others.

SCHEDULE

The SAS Contractor's May 2009 schedule update indicates that the project as a whole is about 10 months behind schedule. Shop drawing development for the East End of the Orthotropic Box Girder (OBG) Lifts 13 and 14 continues to be an issue. Impacts to fabrication have yet to be fully determined. Shop Drawings for Lift 12 were completed and fabrication has begun; both occurring later than projected.

The Contractor's May 2009 schedule update shows the first shipment of OBG lifts leaving China in July 2009. Opinions differ about ZPMC being able to achieve this date as there is a significant list of items that need to be corrected prior to shipment. An agreement was made last quarter to try and mitigate 6 months of delay by accelerating fabrication. The hope was to bring the schedule back by as much as 6 months, but this is unlikely to occur. Shipment dates for the first shipments will not meet the accelerated dates.

Teams were formed in the previous quarter to generate sections of a new opportunity schedule by April 2009. However, the development of this schedule has stalled as team members focus on resolving the East End shop drawing and fabrication issues. Resumption of schedule recovery or acceleration discussions is unlikely to occur until the prior fabrication and East End issues are resolved.

ISSUES

Negotiations are underway concerning the resolution of previous fabrication issues. This resolution is expected to include the first eleven OBG lifts and the Tower.

The development and approval of shop drawings for the East End (Lifts 13 and 14) of the OBG continues to be a challenge. The Department and the Contractor are negotiating an agreement as to the best way to overcome this challenge.

The Contractor's methods of painting the OBG and Tower in China became an issue recently and remain to be resolved.

2.2 YBI DETOUR CONTRACT

The probable cost of risks decreased about 50 percent this quarter. This was primarily due to the transfer of a portion of the CCO risks to the contract CCO Log.

The TBPOC added an extra day of bridge closure to the Labor Day weekend traffic shift. The plan is to close the bridge for 4 days instead of 3 days.

2.3 OAKLAND TOUCHDOWN WESTBOUND CONTRACT

The probable cost of risks has decreased this quarter, mainly due to the progress of the work. A new CCO allowance has been added as risk mitigation to traffic impacts of the trenching operation scheduled for the Labor Day weekend bridge closure.

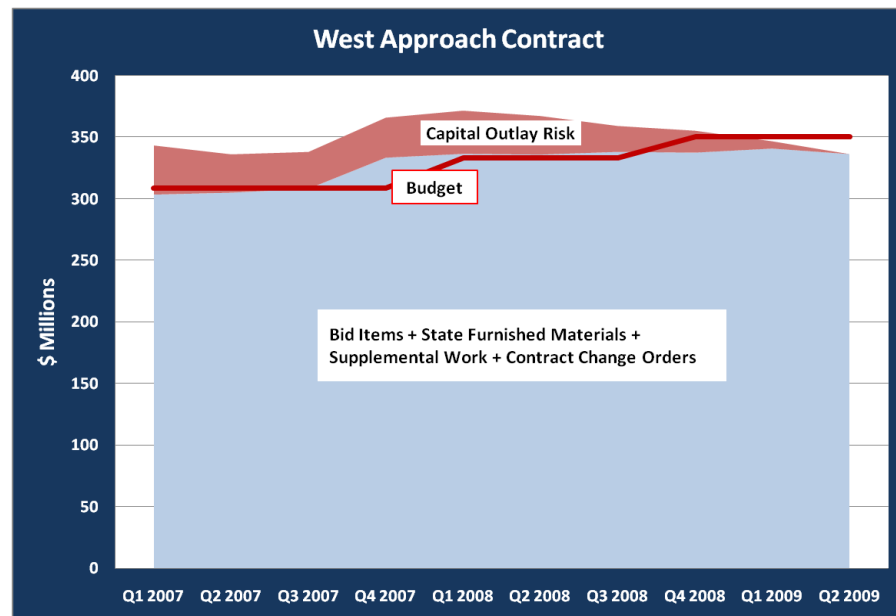
2.4 YBI TRANSITION STRUCTURES #1 CONTRACT

The contract bid opening was changed to December 15, 2009. The probable cost of risks of this contract increased due to the addition of allowances for addenda items that are yet to be included in the estimate.

2.5 WEST APPROACH CONTRACT

The West Approach construction contract was accepted April 8, 2009.

The Department implemented a formal risk assessment process for the West Approach project. From its inception, the risk management team has consistently predicted the range of the final cost of the project, as the trend chart below attests. The project will be completed under its current budget.



3 POTENTIAL DRAW ON PROGRAM CONTINGENCY

3.1 TOTAL CONTINGENCY AND RISK MANAGEMENT COST

The total contingency available to cover all risks comprises the contingency available from all contracts, plus the current balance in the Program Contingency. Each contract in design has an assigned contingency allowance. A contract in construction has a remaining contingency that is the difference between its budget and the sum of Bid Items, State Furnished Materials (SFM), Contract Change Orders (CCOs) and Remaining Supplemental Work (SW). COS has no contingency allowance. The amount by which the sum of all risks exceeds the total of all contingencies available from contracts represents a potential draw on the Program Contingency.

The following table shows the contingencies in the first and second quarters of 2009, and the change from the previous quarter.

	Q2 2009	Q1 2009	Change
1. Total of Contingency from Contracts (\$M)	285.8	320.1	-34.3
2. Program Contingency Balance (\$M)	689.7	740.3	-50.6
3. Total Contingency (\$M)	975.5	1,060.4	-84.9

The Total Contingency decreased by \$84.9 million due to Contract Change Orders (CCO) approved during the second quarter. \$50.6 million was transferred from Program Contingency to cover some of the CCOs but the total contingency from contracts decreased by the remaining \$34.3 million.

The total cost of all risks (Risk Management Cost) decreased on average by \$39 million from the 1st quarter 2009. The respective RMC curves are shown in Figure 1 with Total Contingency for reference.

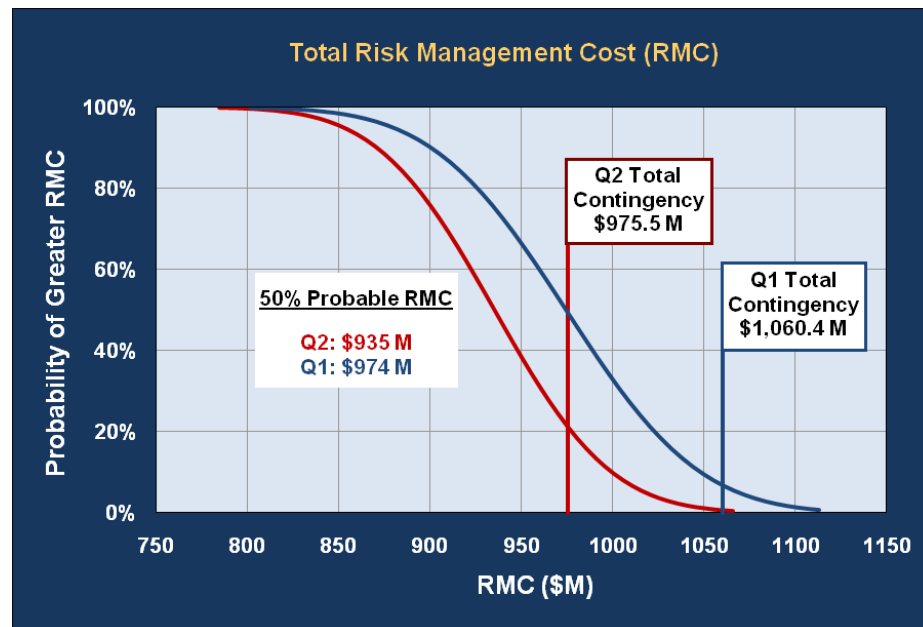


FIGURE 1 – RISK MANAGEMENT COST AND TOTAL CONTINGENCY

The probability of risks exceeding total contingency increased to 20% in the 2nd quarter 2009.

3.2 POTENTIAL DRAW ON PROGRAM CONTINGENCY

The risk management process calculates the potential draw on program contingency each quarter, and compares it to the current balance in the Program Contingency¹. The potential draw curve in Figure 2 is obtained by subtracting the total contingency available from contracts (item 1 in the above table) from the RMC curve in Figure 1.

As of the end of the 2nd quarter 2009, the 50% probable draw on Program Contingency is \$649 million. There is a 20% chance that risks may exceed the current Program Contingency balance.

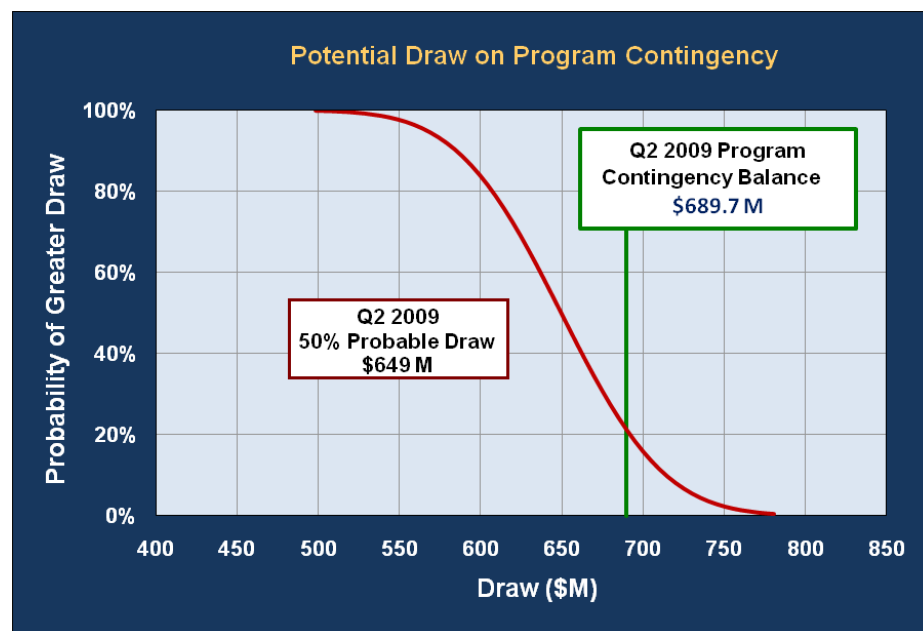


FIGURE 2 – POTENTIAL DRAW ON PROGRAM CONTINGENCY

The potential draw ranges from about \$500 million to \$780 million². The current Program Contingency balance is 80% probable to be sufficient to cover the identified risks. Risk mitigation actions are continuously developed and implemented to reduce the potential draw on the Program Contingency.

Out-of-Scope Program Risks: Program Risks include the cost of risks that are outside the scope and budget of the project (e.g. Light Pipe, BASE System, and potential indirect impacts resulting from the City of San Francisco’s YBI Ramp project). The approximately \$45-85 million in out-of-scope program risks are included in the draw curve.

¹ The Program Contingency funds could be used for other beneficial purposes than to cover risks. The potential draw curve should not be construed as a forecast of the future balance of Program Contingency funds.

² See A.3 *Interpreting Risk Curves* on page 30 for an explanation of the curve and “range”.

3.3 PROGRAM CONTINGENCY TREND

The Quarterly Risk Management Report has reported the potential draw on the Program Contingency since the first quarter of 2007.

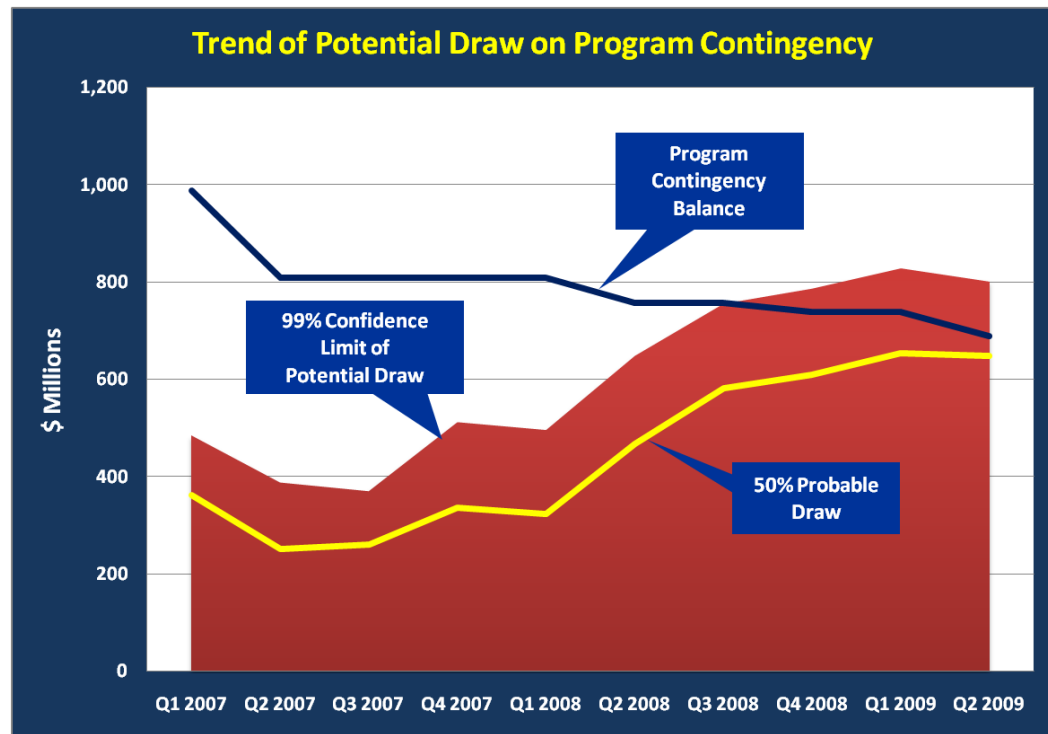


FIGURE 3 – PROGRAM CONTINGENCY TREND

The solid area depicts the range of potential draw on that covers about 99% of all possible outcomes. There are possible outcomes beyond this range but their probability is very small.

4 SAS – SELF ANCHORED SUSPENSION CONTRACT

4.1 STATUS

The SAS contract is estimated 41 percent complete. The probable cost of SAS risks has decreased by 15 percent during this quarter. This is primarily due to the recognition of the amount of fabrication completed on the OBG and the Tower in China, as well as a transfer of funds from the Risk Register to the CCO log as a result of the Department's issuance of Contract Change Order 108 and others.

The SAS Contractor's May 2009 schedule update indicates that the project as a whole is about 10 months behind schedule. Shop drawing development for the East End of the Orthotropic Box Girder (OBG) Lifts 12 – 14 continues to be an issue. Impacts to fabrication have yet to be fully determined. Shop Drawings for Lift 12 were completed and fabrication has begun; both occurring later than projected.

Fabrication continues in China. The May 2009 schedule update shows the first shipment of OBG lifts leaving China in July 2009. Opinions differ about ZPMC being able to achieve this date. Currently there is a significant punchlist of items that need to be corrected prior to shipment. Team China continues to monitor fabrication and to look for ways to recover lost time. An agreement was made last quarter to try and mitigate 6 months of delay by accelerating fabrication; however this schedule recovery is unlikely to occur. Shipment dates for the first shipments will not meet the accelerated dates. Negotiations are underway to resolve previous fabrication issues. This is expected to include the first eleven OBG lifts and the Tower.

Painting of the OBG and Tower has become an issue recently. The Contractor indicated a desire to revise the means and methods to perform this work, and it is unclear what the new proposal will entail or whether it will comply with the terms of the contract. This issue arose at the end of the quarter and remains to be resolved.

Teams were formed in the previous quarter to generate sections of a new opportunity schedule by April 2009. Development of this schedule has stalled as team members focus on resolving East End shop drawing and fabrication issues. Resumption of schedule recovery or acceleration discussions is unlikely to occur until the prior fabrication issues and the East End issues are resolved.

4.2 RISK MANAGEMENT ACTIVITIES

EAST END SHOP DRAWINGS

As discussed in previous Quarterly Risk Management Reports, efforts to generate shop drawings for the East End elements (Lifts 12 -14) have been a time-consuming and cumbersome process. Three-dimensional models of the East End OBG lifts were developed in the 3rd and 4th Quarters of last year. The modeling identified many conflicts that were resolved or could be resolved prior to developing shop drawings. However, this was only a preliminary step in the development of shop drawings for these elements. The development and approval of shop drawings is taking much longer than anticipated.

Shop Drawings for Lift 12 have been completed and approved by the Department. The approval was not in time to prevent shop space at ZPMC in China from being idle for periods of time.

Approval of the Lift 13 and 14 shop drawings is expected by the end of the calendar year. However, the date is uncertain because it assumes that several proposed or newly implemented schedule mitigation measures will be effective. The Contractor's May 2009 Update shows approval of Lift 14 in March of 2010 and pessimistic reports indicate July or August 2010 as a likely date. Department representatives are meeting regularly with the Contractor to identify opportunities to improve the review/approval process and to get the drawings ready for ZPMC. The process to date has been hampered by the complexity of the steel in this area of the bridge, by the parties working at multiple locations, and by communication and trust issues among the parties.

During the previous quarter, the urgency of shop drawing development escalated to a point where it became one of the most important challenges on the project. To address this challenge, the Department, TY Lin, ABF, and CanDraft (the detailer) began discussing ways and means to expedite delivery and approval of the drawings while maintaining the quality necessary to minimize the passing of risks into fabrication. Actions include the co-location of personnel from the Department, ABF, and TY Lin at CanDraft's detailing offices in Vancouver, Canada. In addition, methodologies to streamline shop drawing approval and to repackage submittals to coincide with ZPMC's anticipated fabrication schedule are expected to be implemented. The Department and the Contractor have yet to come to an agreement on the best way to handle the review and approval of the drawings. The intent of co-location is to get all parties together in one place so that issue resolution could be streamlined. Currently, co-location does not appear to be providing the anticipated benefit, apparently due to communication differences among the parties



FABRICATION OF OBG AND TOWER

Team China continues to develop strategies to reduce risk and to accelerate fabrication while maintaining the specified quality.

Team China is working with the Contractor and ZPMC to mitigate OBG and Tower fabrication delays shown in the Contractor's latest schedule update. Responses include the implementation of the additional shop space change order (CCO #108) and the use of shop space intended for other ZPMC projects should the opportunity arise.

Last quarter, Team China recommended the construction of an environmentally controlled temporary shelter to enable work to continue throughout the summer months sheltered from the weather. Work could proceed in multiple shifts to expedite fabrication. To date there has been no significant progress on this issue.



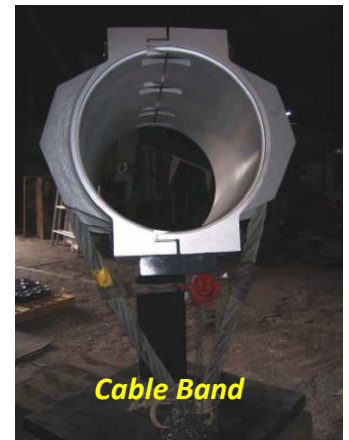
PAINTING OF OBG

The contractor is proposing revisions to its approved painting means and methods, now wanting to paint the OBG elements outdoors. Team China maintains that the environmental conditions at the fabrication facility will render approval of such a proposal unlikely, particularly in light of their obligation to meet delivery schedules. This issue was introduced at the end of the quarter. Possible outcomes include resolution in China, delayed delivery (pessimistic outcome) and painting the elements in California upon arrival.

SAS CABLE INSTALLATION

While the SAS appears to have two cables, there is actually only one continuous main cable that is anchored within the decks at the eastern end where it ties into the Skyway orthotropic box girder sections. This cable is carried over the tower and wrapped around W2 bent cap at the western end. The Cable Focus Team is developing strategies and solutions to mitigate potential risks associated with the cable.

The Cable Focus Team meets weekly to address issues and refine plans. It has retained international experts in cable installation. The Cable Engineering Risk Management (CERM) Team provided recommendations for the Department and the Contractor to explore.



SAS BARGE CRANE PROCUREMENT AND DELIVERY

The Barge Crane arrived at the SAS site last quarter. The risk that the barge's "Coastwise" certification status would be challenged when the crane is put into service lifting production elements has been retired as the Contractor received a favorable ruling from the Labor Board and the Longshoremen Union has agreed to abide by this ruling.



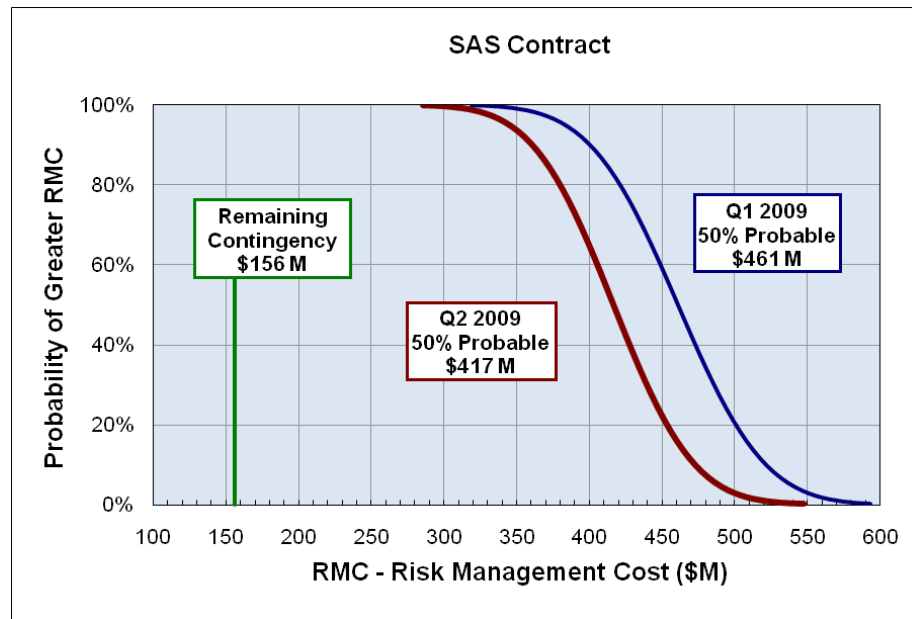
JOINT OPPORTUNITY SCHEDULE

As previously discussed, the Department and ABF were to work on developing a Joint Opportunity Schedule to be used in managing the project. The effort was restarted this quarter but quickly ceased as efforts were refocused on other pressing issues.

4.3 RISK MANAGEMENT COST

The chart below shows the probability distribution of Risk Management Cost (RMC). This information is provided to the Project Manager and Program Manager for their consideration in budget analysis and quarterly forecasting.

The current quarter RMC probability distribution is the aggregate of risks, Notices of Potential Claims (NOPCs) and future CCOs as of June 30, 2009. The remaining contingency on this contract is \$156 million.

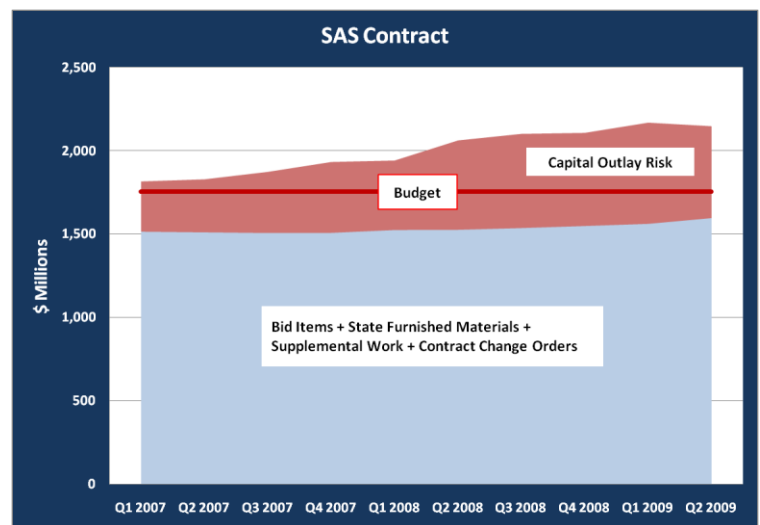


The following table shows three RMC values from the current curve, each with its associated probability of being exceeded.

Probability of Greater Risk Management Cost			
Probability	90%	50%	10%
Risk Management Cost	\$360 M	\$417 M	\$472 M

RISK MANAGEMENT TREND

The chart shows the total of Bid Items, SFM, remaining SW and CCOs from the 1st quarter 2007 to date. The range of CO risks is on top (in red). The width of the range embraces over 99 percent of the possible outcomes. The budget line is the approved TBPOC budget for the quarter.



4.4 LOOK AHEAD

ENGAGE SCHEDULE PARTNERSHIP

The Department's Corridor Schedule Team (CST) continues to assess contract schedules. To date this analysis has been difficult primarily due to the complex and evolving nature of the work, the Contractor's construction engineering, and the level of detail in the Contractor's submitted schedule. The complexity of the project and its schedule makes it difficult for the Contractor to maintain and submit updates in a timely manner. The CST spends most of its time analyzing the logic revisions and changes made from previous updates, and there is little time left to assess the schedule for potential future risks and opportunities. The East End is an example of project challenges that were unknown until it was too late to fully mitigate impacts.

An important aspect of this schedule and of all schedules for large projects is that there may be multiple critical paths on a project. Focusing on the path that is the most critical, while important, may divert attention from other near-critical paths. Management needs to recognize that there are several paths on the project that are competing for criticality. Actions on one path may impact the outcome of another or force criticality to another path. As an example, if there are two competing paths that are within a month of each other, saving several months on the most critical path will not result in the anticipated savings as there is now a new critical path that drives the schedule.

The Opportunity Schedule development began as a joint effort between the Department and the Contractor. It has been tabled as efforts have been redirected to resolving the East End working drawing issues. As stated last quarter, the Corridor Schedule Team and the Risk Management Team believe that the project and the program will be best served by a refocused effort to jointly develop a schedule for the remaining portion of the project. The Risk Management team views the schedule as a planning tool that should be used to identify and call attention to risks and their potential impacts to the structure and bridge opening should no attempt be made to mitigate them. Others believe that the schedule, at least in regard to the contractual CPM schedule specification, is a tool to document and quantify the impacts of issues that have already occurred. In order to move forward along the path to create a joint opportunity schedule, this core difference in philosophy needs to be addressed and resolved. It is important to note that these differences of opinion occur within both the Department and the Contractor teams, and not just along contractual lines.

EAST END DETAILING

The East End of the OBG (Lifts 12 – 14) is significantly more complicated than the other lifts due to superelevation transitions, horizontal curves, cable anchorages, hinge diaphragms, etc. In the 4th quarter of 2008, three-dimensional modeling of the area was successful in identifying conflicts and complexity issues. The development of shop drawings has been extremely complicated and continues to require a coordinated effort by design, construction and the contractor. The Working Drawing Campus Team as well as the Department's Management will continue to engage the Contractor and determine ways to expedite shop drawing reviews and to minimize rework. To date these efforts have resulted in no significant recovery.

RESOLUTION OF FABRICATION ISSUES

In this quarter the Department issued a contract change order to the Contractor to provide initial compensation for impacts to fabrication of the tower and the OBG Lifts 1 – 11 (CCO #108). In addition, the Department initiated negotiations to resolve other outstanding issues and put them

behind. It is important to note that there will be several similar change orders over the next year or so. Resolutions are expected to be grouped into several categories, with the Tower and OBG Lifts 1 through 11 being the first.

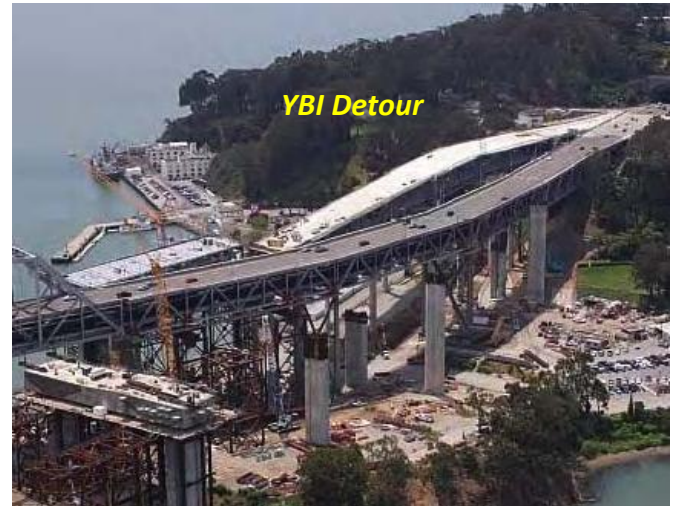
Other resolutions will likely include East End shop drawing development, East End fabrication and if necessary, one to address construction activities in the Bay Area. A change order to address preliminary compensation to the shop drawing detailers is in progress. It is anticipated that this will occur in steps, as the shop drawings issue has been ongoing and is expected to continue.

5 YBI DETOUR CONTRACT

5.1 STATUS

This contract is in construction with approximately 80 percent of the revised scope of the contract now complete. The probable cost of risks decreased about 50 percent this quarter. This was primarily due to the transfer of a portion of the CCO risks over to the contract CCO Log. Four risks were retired and one new NOPC risk (State Sales Tax Increase) was added this quarter.

The TBPOC decided to add an extra day to the Labor Day weekend bridge closure. The bridge will be closed for 4 days instead of 3 days.



5.2 RISK MANAGEMENT ACTIVITIES

EAST TIE-IN / TRAFFIC SWITCH

The collaborative on-site meetings between Construction, Design and the Contractor at the different fabrication facilities now continue in the field. These meetings help to resolve various constructability issues that could cause significant delays to the traffic switch schedule.

Bridge closure is now scheduled for the 2009 Labor Day weekend. It is optimal for the corridor construction schedule and presents minimal impact to public traffic.

The Department and the Contractor performed a risk analysis on the weekend schedule and found that a four-day work window may be required to complete the work. The TBPOC subsequently approved the added fourth day to the Bay Bridge closure.



The Department and the Contractor, in association with many local agencies, continue to develop a contingency plan that will be finalized a few weeks prior to the roll-out/roll-in weekend work.

DEMOLITION

The project risk management team had several workshops to assess the cost/benefits of demolishing the YB4 span up in the air versus lowering it to the ground for demolition. A matrix of

risks was quantified and helped the project team to decide that demolition closer to the ground will cost less and reduce schedule risks.

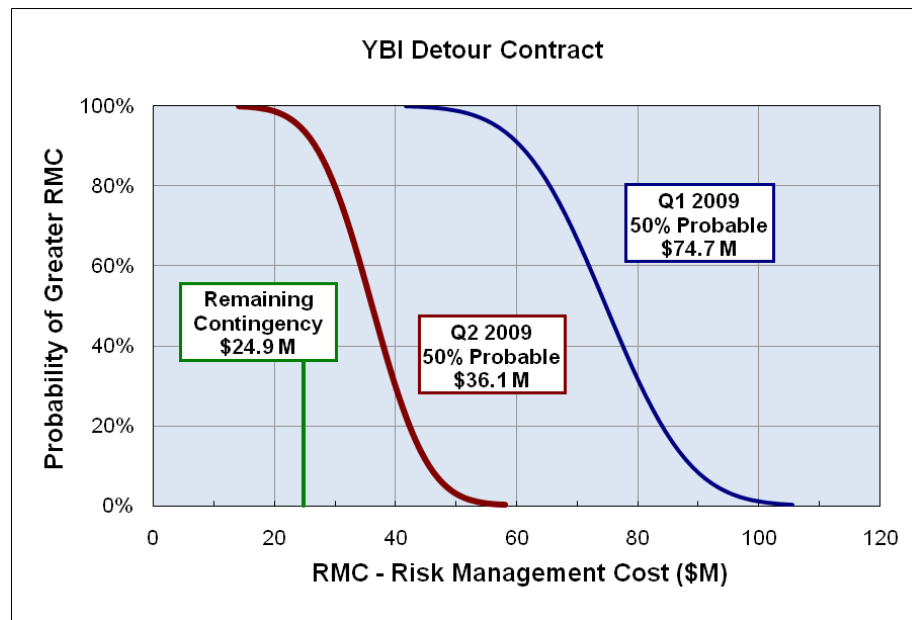
PROJECT COMPLETION

Project Management and the Contractor came to an agreement on overall project completion and a CCO was executed to extend the project duration into December 2010.

5.3 RISK MANAGEMENT COST

The chart below shows the probability distribution of RMC. This information is provided to the Project Manager and Program Manager for their consideration in budget analysis and quarterly forecasting.

The current quarter RMC probability distribution is the aggregate of risks, NOPCs and future CCOs as of June 30, 2009. The remaining contingency on this contract is \$24.9 million.



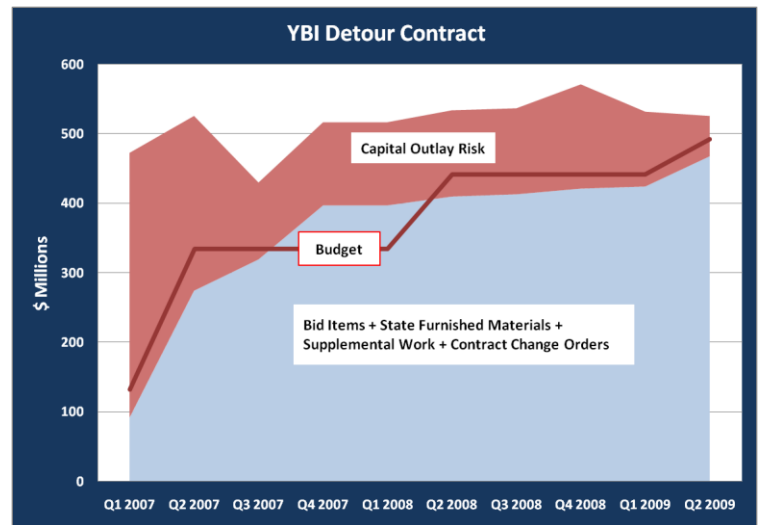
The following table shows three RMC values from the current curve, each with its associated probability of being exceeded.

Probability of Greater Risk Management Cost			
Probability	90%	50%	10%
Risk Management Cost	\$26.8 M	\$36.1 M	\$45.5 M

RMC TREND

The chart shows the total of Bid Items, SFM, remaining SW and CCOs from the 1st quarter 2007 to date. The range of CO risks is on top (in red). The width of the range embraces over 99 percent of the possible outcomes. The budget line is the approved TBPOC budget for the quarter.

The TBPOC increased the budget by \$50.6 million this quarter.



5.4 LOOK AHEAD

YBI DETOUR TRAFFIC SWITCH

The traffic switch on to the YBI detour will occur in the 3rd quarter 2009. A significant portion of the project risks are expected to be reduced after the Labor Day weekend work is completed. Event and contingency planning will also continue up to the closure and the outreach effort will be commensurate with the planning that went into the 2006 and 2007 bridge closures.

6 OAKLAND TOUCHDOWN #1 (WESTBOUND) CONTRACT

6.1 STATUS

This contract is in construction, nearing 75 percent completion. The probable cost of risks decreased by 8 percent this quarter, mainly due to the progress of the work. Three risks were reduced and two retired. A new CCO allowance was added as risk mitigation to traffic impacts of the trenching operation scheduled for the Labor Day weekend bridge closure.



6.2 RISK MANAGEMENT ACTIVITIES

EASTBOUND ACCESS DURING LABOR DAY TRENCHING OPERATION

A decision was made to trench all five lanes of the eastbound highway during the Labor Day weekend bridge closure, to mitigate risks related to the Jack and Bore operation originally planned. To avoid interruption to the YBID Contractor during the Roll-Out/Roll-In operation, two 2-lane ramps will be constructed as a detour around the ductbank trenching area. A CCO allowance has been added to account for the costs of the ramps.

PIPE BEAMS INTERFACE WITH SKYWAY

The westbound pipe beams were successfully pulled into the Oakland Touchdown structure, and the associated risk has been reduced by half. The remaining allowance covers risks related to the eastbound deck alignment and pipe beam interface with Skyway.

CHANGES TO SHORE BIRD HABITAT

A rip-rap shore bird habitat is to be constructed by the OTD1 project as part of the ongoing environmental conservation efforts of the Department. To better protect the birds, the San Francisco Bay Conservation and Development Commission (BCDC) requested a change to the location of the habitat from 60 feet to 200 feet from the shore. The change requires marine access that may impact the Bay. The CCO allowance was increased to account for potential mitigation measures such as eel-grass replanting and Bay floor restoration.

WORKING DRAWINGS REVIEW

All Integrated Shop Drawings have been completed and approved this quarter. The risk of delays in working drawings review by the Department is now minimal and has been retired.

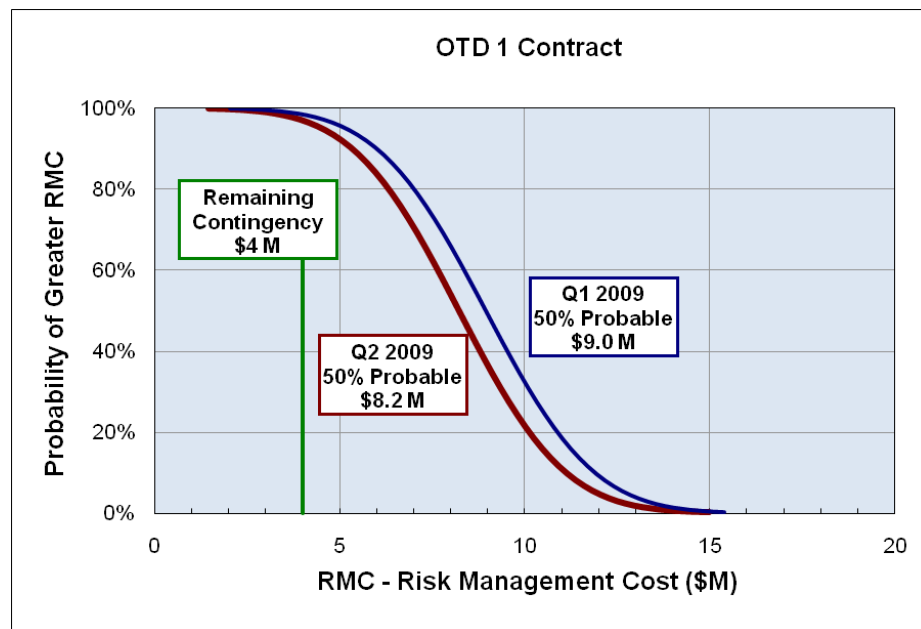
ACCESS TRESTLE TO SKYWAY AND CROSSOVER BRIDGE

The access trestle to Skyway was successfully removed by the OTD1 contractor prior to the start of the eastbound structure construction. The crossover bridge will not be removed by OTD1, and a risk related to complications with the removal has been retired.

6.3 RISK MANAGEMENT COST

The chart below shows the probability distribution of RMC. This information is provided to the Project Manager and Program Manager for their consideration in budget analysis and quarterly forecasting.

The current quarter RMC probability distribution is the aggregate of risks, NOPCs and future CCOs as of June 30, 2009. The TBPOC has assigned an approved budget for all OTD contracts, and not to this contract, the risk management team allocated \$4 million to this contract from the \$8.2 million contingency remaining for all OTD contracts.



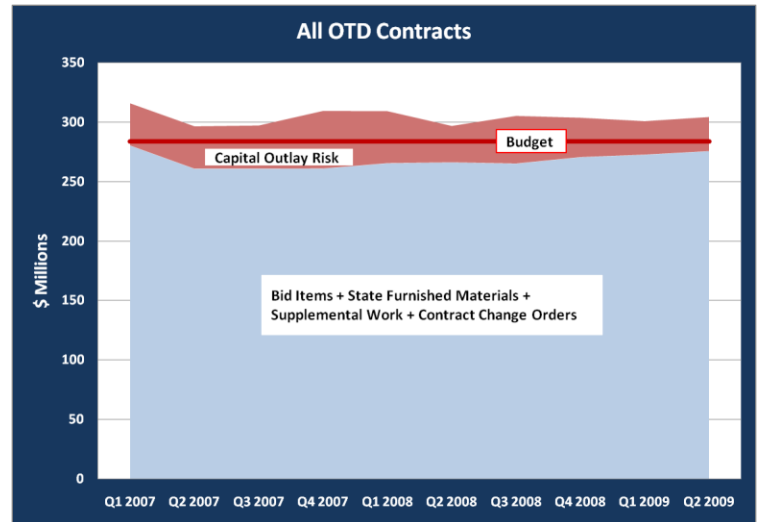
The following table shows three RMC values from the current curve, each with its associated probability of being exceeded.

Probability of Greater Risk Management Cost			
Probability	90%	50%	10%
Risk Management Cost	\$5 M	\$8 M	\$11 M

RMC TREND

The chart shows the total of Bid Items, SFM, remaining SW and CCOs from the 1st quarter 2007 to date. The range of CO risks is on top (in red). The width of the range embraces over 99 percent of the possible outcomes. The budget line is the approved TBPOC budget for the quarter.

The chart is for all OTD contracts combined because the TBPOC has not established a budget for each contract.



6.4 LOOK AHEAD

SCOPE OF WORK DURING UPCOMING BRIDGE CLOSURE

The planning, coordination, and construction of the OTD1 work items scheduled for the Labor Day weekend bridge closure will occur this quarter.

7 OAKLAND TOUCHDOWN #2 (EASTBOUND) CONTRACT

7.1 STATUS

This contract is in design. This is the last contract that could impact the corridor schedule. The probable cost of risks increased by 7 percent this quarter. The increase is mainly due to potential impacts on public traffic that may result from contemplated bridge closures. Two risks were retired and one reduced.

7.2 RISK MANAGEMENT ACTIVITIES

POTENTIAL IMPACTS ON PUBLIC TRAFFIC

A westbound (WB) bridge closure for a couple of days prior to switching traffic onto the new WB structure is under evaluation to ensure that the grinding, OGAC work, and pavement delineation can be completed without potentially impacting safety. A one-night eastbound (EB) bridge closure is also being considered to allow a safe demolition of the existing WB structure where it crosses over live EB traffic. The risk was increased to reflect added costs associated with bridge closures, such as traffic management and public outreach.

ACCESS TO BIKE PATH TEMPORARY PARKING LOT

The access road to the bike-path temporary parking lot is on the former Oakland Army Base. A right-of-entry was obtained to perform materials and environmental testing and to fix the access road. Depending on the testing results, a license from the Army will be needed to construct and use the road.

Added costs may be incurred if hazardous materials are discovered late and are not incorporated into the plans and specifications. Potential delays may result if right-of-way is not granted in time. Access is being negotiated with the Army.

Soil testing was delayed due to departmental budget constraints, resulting in an increase in the risk.

POTENTIAL ENVIRONMENTAL COMPLIANCE REQUIREMENTS

The risk was increased to account for potential environmental mitigation actions that will be required by the San Francisco Bay Conservation and Development Commission (BCDC) for the bus turnaround, for dust control during the demolition of the existing bridge section, and for more stringent Storm Water Pollution Prevention Plan requirements such as those experienced on OTD1.

ELECTRICAL/MECHANICAL CONFLICTS WITH STRUCTURAL ELEMENTS

The risk of encountering electrical/mechanical conflicts with structural elements was reduced this quarter. OTD2 will construct frame 2 of the eastbound bridge. OTD1 already resolved similar expected conflicts during the development of frame 1 Integrated Shop Drawings (ISDs). A risk mitigation plan is being followed, which incorporates the lessons learned from OTD1. ISDs will be developed as part of design, to reduce the likelihood of conflicts and potential costs of rework and/or delays.

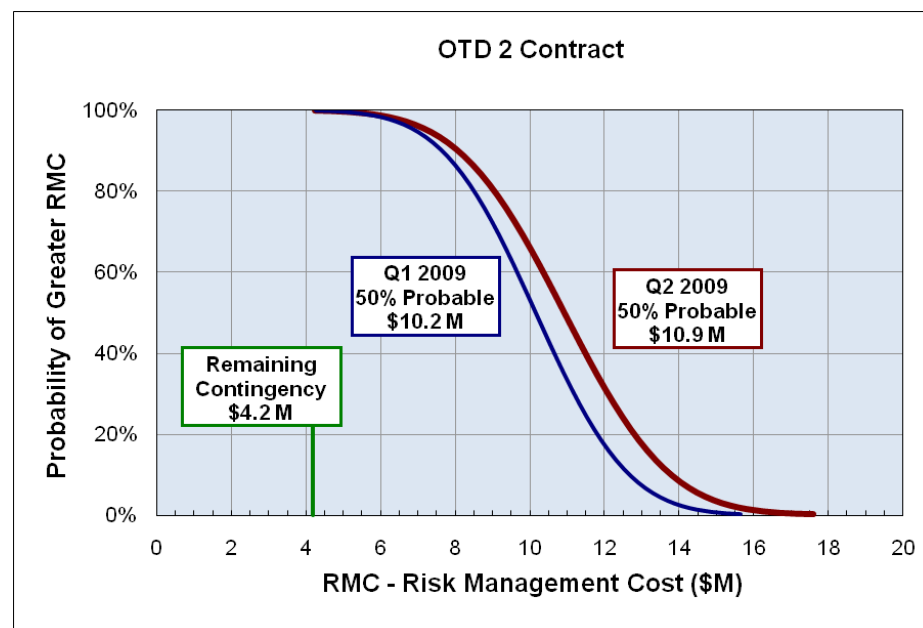
REPLACEMENT OF SKYWAY PLATFORM RAILINGS

The design of the bridge service platform railings has changed, and the Skyway railing will be replaced for aesthetic consistency. OTD2 was directed to add the work to its scope, and a risk allowance was added last quarter. However, all remaining Skyway items are currently under review to determine which contract will perform the work. Until a determination is made, the estimated cost of the items is carried by the program risk register, and the allowance for the railings has been retired from this contract.

7.3 RISK MANAGEMENT COST

The chart below shows the probability distribution of RMC. This information is provided to the Project Manager and Program Manager for their consideration in budget analysis and quarterly forecasting.

The current quarter RMC probability distribution is the aggregate of risks, NOPCs and future CCOs as of June 30, 2009. The TBPOC has assigned an approved budget for all OTD contracts, and not to this contract, the risk management team allocated \$4.2 million to this contract from the \$8.2 million contingency remaining for all OTD contracts.



The following table shows three RMC values from the current curve, each with its associated probability of being exceeded.

Probability of Greater Risk Management Cost			
Probability	90%	50%	10%
Risk Management Cost	\$8.1 M	\$10.9 M	\$13.8 M

RMC TREND

The TBPOC has not established a budget for each OTD contract. The chart for all OTD contracts combined is on page 18.

7.4 LOOK AHEAD

DEVELOPMENT OF INTEGRATED SHOP DRAWINGS (ISDs) DURING DESIGN

A decision was made to develop ISDs for the project during the design phase to solve electrical-mechanical-structural conflicts and revise the contract plans accordingly. Lessons learned from the OTD1 and YBITS1 projects are to be incorporated and a timetable should be adopted for the ISDs work.

PROPOSED SCHEDULE EVALUATION

The Oakland Touchdown 1 cellular concrete operation was monitored to evaluate the feasibility and potential costs of compressing the OTD2 schedule. A schedule analysis should be performed and the estimate updated accordingly.

PLANNING BRIDGE OPENING

The OTD2 project will put traffic on the westbound lanes and later on the eastbound. Detailed plans for the traffic switches are to be prepared, including an evaluation of whether a single full bridge closure will be better than two one-way closures.

8 YBI TRANSITION STRUCTURES #1 CONTRACT

8.1 STATUS

The contract bid opening has been changed to December 15, 2009. The probable cost of risks of this contract increased by 52 percent this quarter, due to the addition of allowances for addenda items that are yet to be reflected in the estimate.

8.2 RISK MANAGEMENT ACTIVITIES

BID OPEN DATE CHANGE

The YBID Contractor must complete the demolition and W5 construction before YBITS1 commences field work. Delays may result if the YBITS1 structure is ready for Hinge “K” closure, but the SAS contractor is not ready to vacate the area. Based on the status of the YBID and SAS contracts, and to mitigate construction delay risks, the TBPOC approved moving the bid open date to December 15, 2009.

ADDENDA ITEMS COST ALLOWANCE

The majority of the increase in risk management cost this quarter is attributed to the addition of two allowances to the risk register:

- An allowance for approved addenda items (addendum 5).
- An allowance for yet-to-be-approved addenda items (addenda 6 and 7).

The risk register will carry these addenda items costs until they are added to the Basic Engineering Estimating System (BEES). Once the estimate is updated, this allowance will be retired from the risk register.

CONSTRUCTION IMPACTS ON YERBA BUENA ISLAND LOCAL ROADS

The Contractor could impact traffic or keep lanes of local roads closed for periods longer than currently anticipated. Macalla Road is being significantly altered near the Substation. The risk increased to account for potential costs of local roads rehabilitation work and for additional measures that may be needed to maintain traffic on the island.

WORKING DRAWINGS REVIEW TIMES

Some working drawings are expected to be on the critical path. The risk was increased to reflect concerns that the State budget crisis and the recent decision to reduce Capital Outlay Support (COS) costs may affect the levels of review staff available during construction. The working drawings campus item has been moved to addendum #6, with approval expected next quarter.

ELECTRICAL/MECHANICAL CONFLICTS WITH STRUCTURAL ELEMENTS

Past projects experienced electrical/mechanical conflicts with structural elements, due in part to the fact that each project was designed by a different firm. A risk mitigation plan was adopted, which includes:

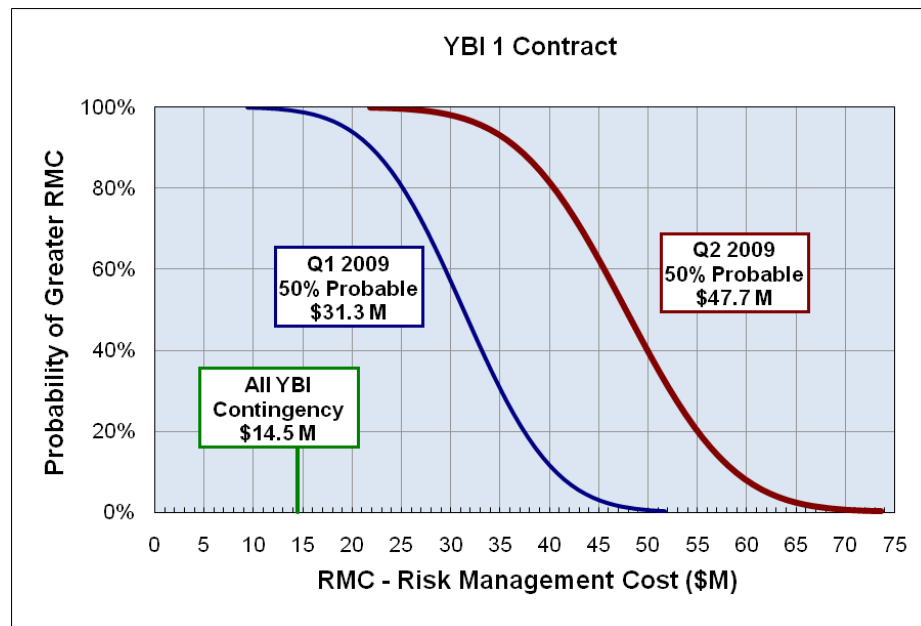
- Integrated Shop Drawings (ISDs) are being developed as part of design to reduce the likelihood of conflicts and potential costs of rework and/or delays. The first phase – ISDs preparation – is to be completed by the end of Q2 2009, followed by a conflict resolution phase. Plan sheets are updated as issues are identified.
- ISD specifications have been included in addendum #5, requiring the Contractor to produce ISDs that include its proprietary work methods as first order of work.

The risk was increased this quarter due to conflicts identified between structural and utility elements. If conflicts are not resolved in time to issue the solution in addendum #7, a CCO will be issued, potentially resulting in higher costs.

8.3 RISK MANAGEMENT COST

The chart below shows the probability distribution of RMC. This information is provided to the Project Manager and Program Manager for their consideration in budget analysis and quarterly forecasting.

The current quarter RMC probability distribution is the aggregate of risks, NOPCs and future CCOs as of June 30, 2009. The TBPOC has assigned an approved budget for all YBI contracts, and not to this contract, the risk management team allocated \$14.5 million to this contract from the \$18.3 million contingency remaining for all YBI contracts.



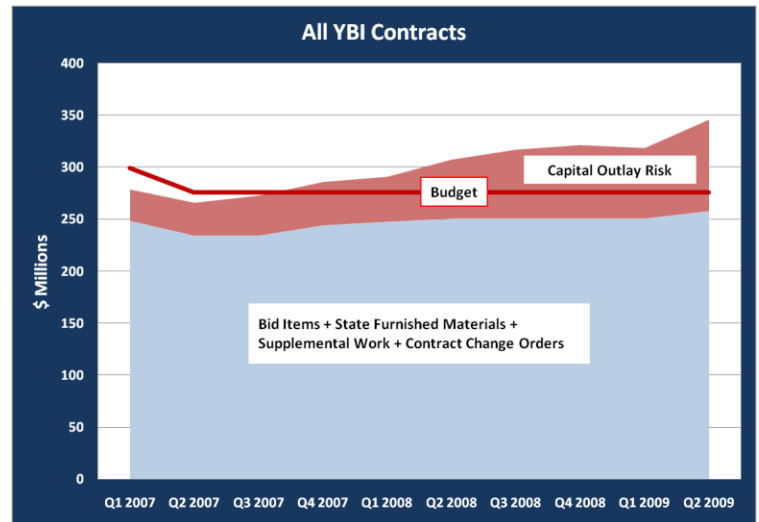
The following table shows three RMC values from the current curve, each with its associated probability of being exceeded.

Probability of Greater Risk Management Cost			
Probability	90%	50%	10%
Risk Management Cost	\$36.6 M	\$47.7 M	\$58.7 M

RMC TREND

The chart shows the total of Bid Items, SFM, remaining SW and CCOs from the 1st quarter 2007 to date. The range of CO risks is on top (in red). The width of the range embraces over 99 percent of the possible outcomes. The budget line is the approved TBPOC budget for the quarter.

The chart is for all YBI contracts combined because the TBPOC has not established a budget for each contract.



8.4 LOOK AHEAD

INTEGRATED SHOP DRAWINGS CONFLICT RESOLUTION

Conflicts identified in the ISDs are to be prioritized and weekly face-to-face meetings to resolve the issues will continue. The drafting shops and design will communicate continuously to implement solutions. Plan sheets are to be revised and issued in Addendum #7.

9 YBI TRANSITION STRUCTURES #2 CONTRACT

9.1 STATUS

This contract is in design with current PS&E date of March 2011. The probable cost of risk has not changed this quarter.

9.2 RISK MANAGEMENT ACTIVITIES

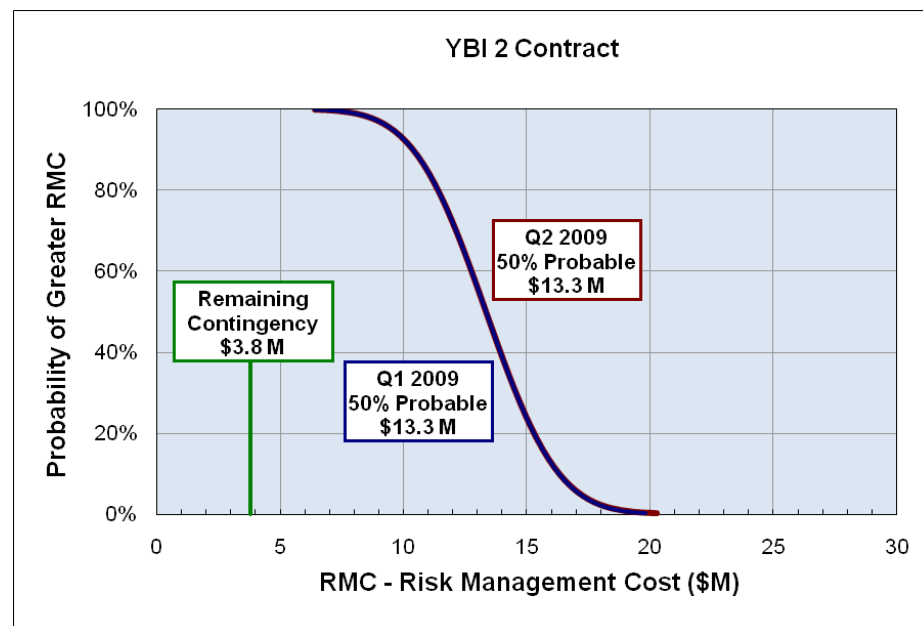
POTENTIAL SCOPE GROWTH TO SATISFY U.S. COAST GUARD REQUESTS

YBITS2 is the last large-scale project on Yerba Buena Island. Operations of the U.S. Coast Guard (USCG) base must not be detrimentally affected by the SFOBB project. Current USCG staff may change, and a revision to the terms of the agreements may be requested. A new license is under negotiation.

9.3 RISK MANAGEMENT COST

The chart below shows the probability distribution of RMC. This information is provided to the Project Manager and Program Manager for their consideration in budget analysis and quarterly forecasting.

The current quarter RMC probability distribution is the aggregate of risks, NOPCs and future CCOs as of June 30, 2009. The TBPOC has assigned an approved budget for all YBI contracts, and not to this contract, the risk management team allocated \$3.8 million to this contract from the \$18.3 million contingency remaining for all YBI contracts.



The following table shows three RMC values from the current curve, each with its associated probability of being exceeded.

Probability of Greater Risk Management Cost			
Probability	90%	50%	10%
Risk Management Cost	\$10.4 M	\$13.3 M	\$16.3 M

RMC TREND

The TBPOC has not established a budget for each YBI contract. The chart for all YBI contracts combined is on page 24.

9.4 LOOK AHEAD

DEVELOPMENT OF INTEGRATED SHOP DRAWINGS (ISDs) DURING DESIGN

A decision has been made to develop ISDs for the project during the design phase, to solve electrical-mechanical-structural conflicts and revise the contract plans accordingly. Lessons learned from prior projects should be incorporated and a timetable adopted for the ISDs work. This project has relatively fewer utilities compared to other projects.

PROPOSED SCHEDULE EVALUATION

The current YBITS 2 advertise and award schedule should be adjusted in the future to match the progress of the YBITS1 and OTD2 projects.

10 WEST APPROACH CONTRACT

10.1 STATUS

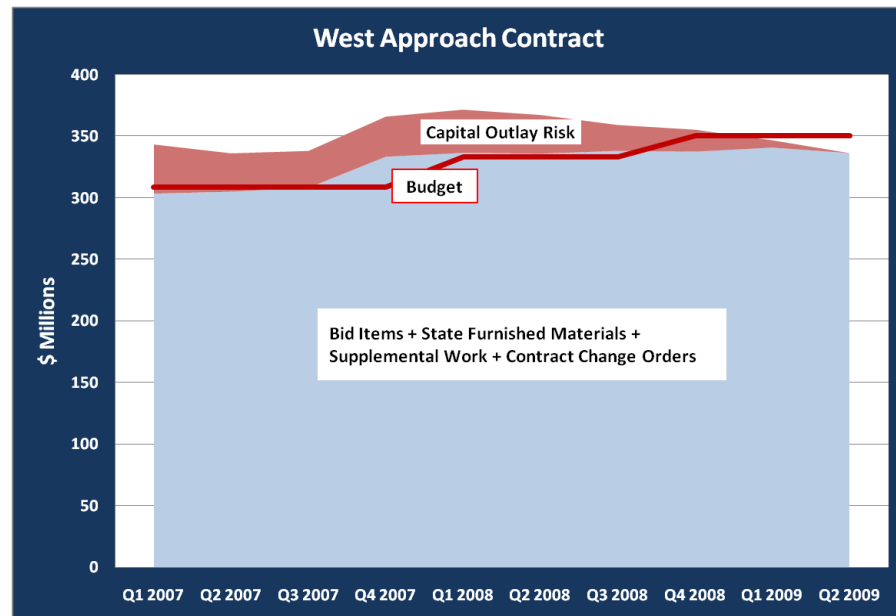
The West Approach construction contract was accepted April 8, 2009. The proposed final estimate was run in May 11, 2009 and the Contractor responded with exceptions less than \$200,000. The Final Estimate will be run in July 2009. All remaining project risks are now retired.



10.2 RISK MANAGEMENT ACTIVITIES

The Department began a formal quantitative risk assessment early in the West Approach project. Since that initial assessment, the quantitative risk analysis has consistently predicted that the cost of the West Approach project would very likely come in over the original \$309 million contract budget. In particular, from Q1 2006 to date the probable cost for the West Approach has ranged from \$325-\$350 million. The project is presently finalizing the Final Estimate and it is likely that the final cost of the project will come in close to \$338 million and in line with the risk assessments.

As the trend chart below attests, the West Approach risk management team had accurately assessed the project costs to the end of the project, helping program management to more effectively manage program funding.



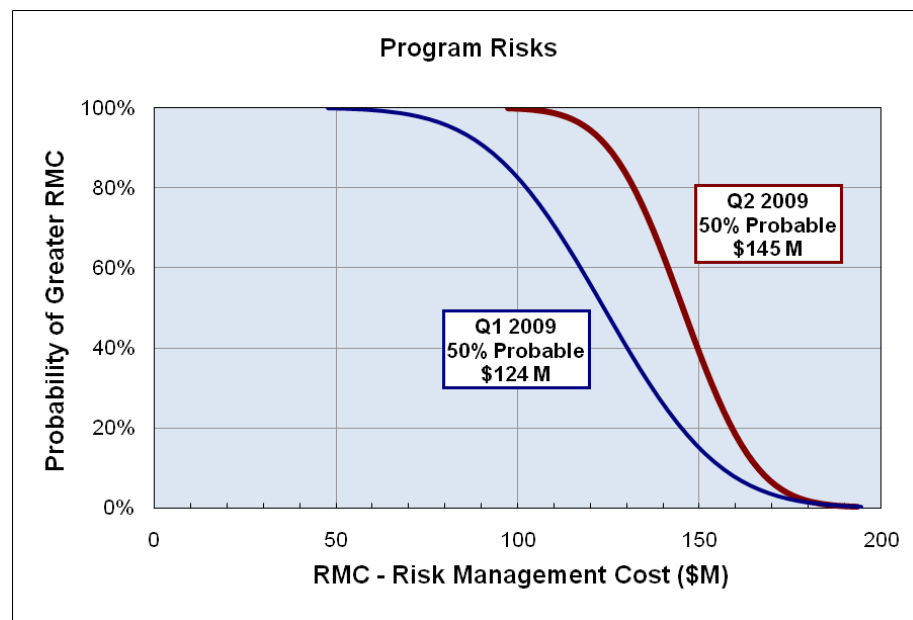
11 PROGRAM RISKS

The Program Risk Register contains risks that are not specific to a particular contract, risks that may affect several contracts, and costs of items that may have to be paid for by Program Contingency despite being outside the scope and budget of the program, Program risks increased by 17 percent from the previous quarter, due largely to:

- Increased potential cross-delay among contracts,
- Additional costs and potential delays from renewal of permits,
- A reduction in the valuation of excess right-of-way parcels to be sold,
- Additional work on the Skyway and corridor clean-up costs, and,
- The potential impact of State material tax increases.

11.1 RISK MANAGEMENT COST

The chart below shows the probability distribution of Program RMC as of June 30, 2009.



The following table shows three RMC values from the current curve, each with its associated probability of being exceeded.

Probability of Greater Risk Management Cost			
Probability	90%	50%	10%
Risk Management Cost	\$125 M	\$145 M	\$166 M

About \$45-85 million of the risk is from the out-of-scope items: Light Pipe, BASE system, and residual risk to the Department for including the YBI ramp for the City of San Francisco. The remainder is for the cost of MEP systems, escalation of unawarded contracts, and cross-impact of delays among contracts.

Appendix "A"

RISK MANAGEMENT EXPLANATIONS

A.1 WHAT RISK MANAGEMENT DOES AND DOES NOT INCLUDE

Risk management of a project addresses risks that may affect its defined objectives of cost, time, scope and quality. Given a project plan, risk management generally looks at ways in which the project may not go according to plan. Risk management focuses on the defined project scope and objectives, and therefore does not include:

1. Risks or possible decisions that may kill the project. If the project ceases to exist, there are no risks to manage.

For example, risk management does not include risks such as the loss of funding, natural disaster that destroys all or part of the construction, acts of governments, etc.

2. Risks or possible decisions that may materially change the project. If the project objectives are changed substantially, risk management will start afresh on the "new" project.

For example, the YBID Implementation Strategy Memorandum materially changed the YBI Detour contract. The risk of such a decision was not in the risk register of the original contract.

In a nutshell, risk management is confined to quantifying risks that are intended to be covered by project and program contingency.

A.2 ABOUT "RISK" AND "OPPORTUNITY"

The concept of risk can include both upside as well as downside impacts. This means that the word "risk" can be used to describe uncertainties that, if they occurred, would have a negative or harmful effect, and the same word can also describe uncertainties that, if they occurred, would be helpful. In short, there are two sides to risk: threats and opportunities.

A risk that has no threat is a **"pure opportunity"**. It is simply an unplanned good thing that might happen. For example, a new design method might be released which we can apply to benefit our project.

Opportunity is the **inverse of threat** if a risk has both threat and opportunity. Where a risk variable exists on a continuous scale and there is uncertainty over the eventual outcome, instead of just defining the risk as the downside it might also be possible to consider upside potential. For example, if we have included escalation at 5% in our budget for future contracts and this rate could range from say 3% to 7% depending on economic conditions at the time of advertisement, we have an opportunity in the 3%-5% range and a threat in the 5%-7% range. Opportunity and threat exist in the one risk. If the budget were based on 7% escalation we would have only opportunity. If based on 3% we would have only threat.

Threat and opportunity can also depend on how we define the risk. For example, if the risk is that an external agency may relax its requirements and this saves us money relative to what we have budgeted currently in our plan, this is an opportunity. If the risk is defined as the agency may tighten its requirements and this adds to our costs, this is a threat. We can only separate the

opportunity and threat if we are certain that the agency may act only one way and not the other. If the risk is that the agency may change its requirements, we could have impacts that range from positive to negative. We would have both opportunity and threat in the same risk, and the degree of each would depend on what we have budgeted in our plan.

Uncertainty in the cost of major CCOs is another example of opportunity. If we enter an estimate into the CCO log and the final outcome could range from less than the estimate to more than the estimate, we have both an opportunity and a threat. The degree of opportunity and threat depends on where the estimate lies within the range.

PROJECTS IN DESIGN

Projects in design have the greatest potential for opportunities because the project is still open to changes. Risk reduction and avoidance are opportunities, as are value analysis, constructability reviews and innovations in design, construction methods and materials.

PROJECTS IN CONSTRUCTION

Once a project enters construction, the project objectives (scope, time and cost) are fixed contractually. Any changes are made using a contract change order (CCO). The only opportunity to save money or time is from a negative CCO such as resulting from a Cost Reduction Incentive Proposal (CRIP) by a contractor. Otherwise, CCOs add cost and/or time to the project. So, the prime opportunity during construction is to reduce or eliminate risks.

A.3 INTERPRETING RISK CURVES

Combining all risks of a contract using Monte Carlo simulation methods produces a risk cost curve such as in Figure 4. It is the familiar "bell curve" shape that covers all possible combinations of the risks, and can be thought of as a "smoothed out" version of a histogram that depicts the relative frequencies of small output cost ranges. It extends from zero cost at one end (none of the risks occur) to a very large cost number at the other end (all risks occur). The area under the density curve equals one, that is, it covers 100% of the possible outcomes.

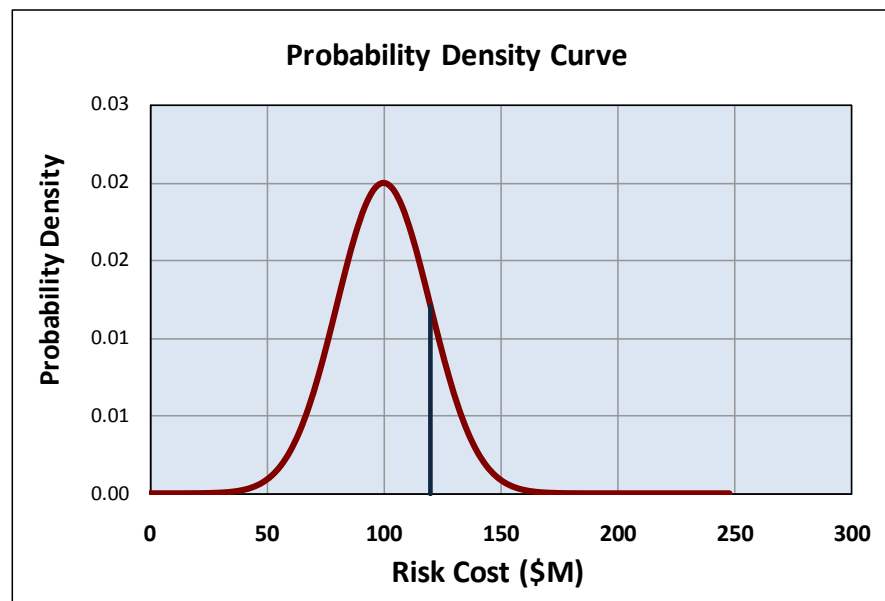


FIGURE 4 – PROBABILITY DENSITY CURVE

The probability density curve is not very convenient for determining the probability of a cost exceeding a specific value. For example, the probability of exceeding \$120M in Figure 4 is determined by calculating the area under the curve to the right of \$120M. Instead of performing such calculations from the probability density curve, it is transformed into the probability curve in Figure 5 by performing the area-under-the-curve calculations for all costs on the horizontal axis.

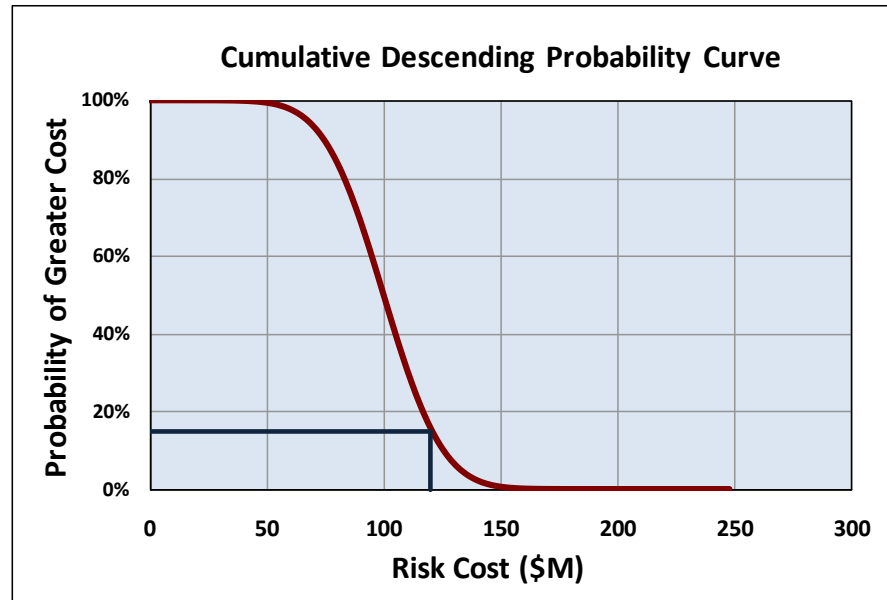


FIGURE 5 – CUMULATIVE DESCENDING PROBABILITY CURVE

The curve in Figure 5 can be used to directly read off the probability of exceeding any value of cost. For example, there is a 15% chance of exceeding \$120M. Note that although the curve appears to reach a zero probability of overrun at about \$150M, there is still less than a 1% chance of some cost greater than \$150M. None of the probabilities above \$150M are zero; they are just very small, much less than 1%.

Note that the curve does not include risks or possible decisions that may kill or materially change the project.

WHAT DO WE MEAN BY “RANGE”?

In our reports, we often refer to a “range” of risk management cost or draw on Program Contingency. Although the risk curve extends to very small values of probability, for practical purposes, we define “range” to cover about 99% of all possible outcomes. In other words, the “range” extends from where the risk curve appears to reach 100% probability to where it appears to reach 0% probability. For example, the “range” of risk cost in Figure 5 is from about \$50M to \$150M.

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** October 8, 2009

FR: Program Management Team (PMT)

RE: Agenda No. - 6a1

Item- San Francisco-Oakland Bay Bridge Updates
Self-Anchored Suspension Superstructure Update

Recommendation:

For Information Only

Cost:

N/A

Schedule Impacts:

N/A

Discussion:

A verbal update on the Self-Anchored Suspension Superstructure contract will be provided at the October 16th meeting.

Attachment(s):

N/A

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** October 8, 2009

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 6a2

Item- San Francisco-Oakland Bay Bridge Updates
SAS Project – Status of CCO 108 Settlement Negotiations -
Fabrication Issues Related to OBG Lifts 1-11 and T1 Tower

Recommendation:

APPROVAL

Cost:

\$15,480,000.00

Schedule Impacts:

60 additional days (120 days previously approved)

Discussion:

Conceptual approval is requested from the TBPOC to continue negotiations and finalize CCO 108 as proposed. Proposed CCO 108 S1 (attached) provides a contract time extension of 60 days (in addition to 120 days provided under CCO 108) to settle time delay claims through May 20, 2009, except for potential time delays associated with the East End OBG. The Contractor is currently reviewing the proposed 60-day time adjustment settlement provided under proposed CCO 108 S1. It is anticipated that eventual settlement will be between 60 and 90 days.

History

The TBPOC earlier approved CCO 108 to provide a time extension and impact costs resulting from contract change orders, Contractor requests for information (RFIs), and other acts by the Department which have contributed to fabrication delays of OBG lifts 1-11 and T1 Tower at ZPMC facility in China. CCO 108 provided an estimated 120 day time extension and estimated \$45 million in compensation for acceleration incentives (\$13M), estimated direct costs of change orders (\$10.8M) and estimated 4 months of impacts (\$21.2M). The parties have been working to close out the estimated payment and time extension for shipping and project delays associated with OBG lifts 1-11 and the T1 Tower.

Negotiation Status

The Contractor's schedule indicates that the project was extended approximately 10 months through May 2009. The Contractor has claimed that the entire 10 months of delay is the Department responsibility due to excessive RFIs, submittal revisions, untimely contract change orders, and other acts of the Engineer. After extensive negotiations and analysis by both parties, the Contractor offered a compromise time settlement of seven months in addition to three months relief of liquidated damages, should they potentially be incurred. The Department's review has determined the delay exposure to be 180 days (six months), primarily as a result of exposure related to extended submittal review process, additional testing and contract change orders issue after fabrication has started. The proposal set forth in CCO 108 S1 provides a time extension for 180 days (60 additional days + 120 days previously granted) in addition to relief of liquidated damages, should they potentially be incurred, for 90 days. The Contractor is currently reviewing the CCO 108 S1 proposal to resolve the time portion of CCO 108 – currently the parties are one month apart in settlement negotiations.

Exposure

This supplemental CCO provides closure to liabilities estimated in CCO 108 which have extended fabrication time and shipment of OBG lifts 1-11 and T1 Tower.

This change order resolves all CCO Appendix A protests with respect to time. However, the majority of these change orders are directly related to ZPMC fabrication operations. The shop rates for ZPMC continue to be under review. As soon as these rates are finalized and agreed to, the direct costs of the CCOs listed in Appendix A will be paid and closed out. The contractor estimated \$19.9 million in direct costs for which \$10.8 million have been allocated in CCO 108.

Furthermore, indirect impacts resulting from the time extension settlement provided under CCO 108 S1 including labor and equipment impacts both in China and at the bridge site still needs to be negotiated. The impact costs currently being prepared by both parties range from \$40 million to \$75 million. However, CCO 108 provided an advance payment of \$21.2 million. Negotiations are expected to begin after the quantification of time is resolved as proposed under CCO 108 S1.

Timely execution of this supplemental CCO will also provide a frame work for future delays associated with the East End OBG shop drawing issues. Without the closure of the liabilities related to OBG lifts 1 to 11, resolution of the East End delays will be considerably more challenging and time consuming. Moreover,

Memorandum

should settlement not be achieved at this time, the contractor's position will be that the Department is responsible for the full 10 months delay and associated costs.

This supplemental CCO only resolves time associated with past issues and does not include the *following*:

- Compensation of direct costs of CCO's listed in Appendix A that may exceed \$10.8 million.
- Compensation of indirect costs that may exceed \$21.2 million.
- Time for current shipment delays associated with welding repairs after May 20, 2009. Merit of these issues has not been assessed at this time.
- Time adjustment for East End OBG and East End fabrication impacts.

This CCO can be funded from current contract contingency. The costs related to this proposed CCO, in addition to estimated costs above, are within the range of risk management costs anticipated in the approved 2nd Quarter 2009 Risk Management Report.

TBPOC approval is requested to continue negotiations necessary to resolve both time and impact costs associated with OBG Lifts 1-11 and T1 tower through May 20, 2009. The Contractor is currently reviewing the proposed 60-day time adjustment settlement provided under CCO 108 S1. It is anticipated that eventual settlement will be between 60 and 90 days.

Attachment(s):

1. CCO 108, S1
2. CCO 108, S1 Memorandum

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 108 Suppl. No. 1 Contract No. 04 – 0120F4 Road

To: **AMERICAN BRIDGE/FLUOR ENTERPRISES INC A JOINT VENTURE**You are directed to make the following changes from the plans and specifications or do the following for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Confidential DRAFT
Settlement purposes only
 CCO 108S1 - CCO v07 Oct8-09.doc

Description of work to be done, estimate of quantities and prices to be paid. (Segregate by account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is used. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Adjustment of Contract Time:

In accordance with Section 8-1.07, "Liquidated Damages", of the Standard Specifications, this supplemental change order provides an additional time extension of 60 working days, extending Project Completion to October 7, 2013. This change order resolves all known RFI and submittal delays, all project delays and all steel delivery impacts associated with of OBG Lifts 1-11 and the T1 Tower through May 20, 2009. OBG Lifts 12, 13, and 14 drawing, fabrication, and construction impacts, if any, are specifically excluded from this change order except to the extent of the extra work acknowledged in specific change orders below. This change order specifically excludes time requested in ABF's submittals ABF-SUB-001073, ABF-SUB-001144, and ABF-SUB-1347 for TIA#5, TIA#6, and TIA#7, respectively.

This 60-day time extension shall be applied to the current contract completion date for each of the three phases; Phase 1, 2 and 3, as shown in Section 4, "Beginning of Work, Time of Completion and Liquidated Damages", of the Special Provisions. The 60-day compensable time extension will be applied after expiration of the number of working days measured for payment, for time related to overhead, in accordance with Section 10-1.14, "Time Related Overhead", of the Special Provisions.

This change order fully resolves all protests (with respect to time) and provides a time extension for the work associated with the following change orders (including pending and executed change orders):

Pending Change Orders:

CCO 24 - Traveler Rail Modifications
 CCO 25 S0 and S1 – Hinge "A" joint and Barrier rail
 CCO 26 - Wind Generator Vortex Plates
 CCO 27 - Bearing Block and OBG access at PP 8
 CCO 28 - Handrail Modifications to West Deviation Saddle Access
 CCO 31 – Mechanical Modifications
 CCO 33 – Bike path Brackets
 CCO 34 S1 and S2 – W2 & E2 ISD's
 CCO 36 – Tower Anchorage Base Plate
 CCO 38 S1 - Crossbeam Kink and tower Splice Revisions
 CCO 41- Pad Eye Modifications
 CCO 42 S0 and S1 – Electrical and Cable Tray Modifications
 CCO 44 - Barrier Modifications
 CCO 48 - Tower Strut Façade
 CCO 53 - Grinding OBG Deck Plates
 CCO 54 S1 (RFCO 49) Differing site condition Foundation A1
 CCO 55 - Service Platforms
 CCO 59 – Additional OBG penetrations
 CCO 62 – Tower doubler plate and Splice corner details
 CCO 63 – Tower internal Shaft
 CCO 64 – Tower Strut Façades and Cross Bracing
 CCO 65 - Tower Access
 CCO 66 – Caulking
 CCO 68 – Tower Penetrations
 CCO 76 – Hinge K Seismic Joint
 CCO 78 – Forging Bearing Blocks at E2
 CCO 91 S0 and S1 - Additional NDT
 CCO 92 – RFI 1422 castability of east saddle (RFCO 36)
 CCO 93 - Tower Head details
 CCO 95 - Additional Detailing includes (RFCO 27, and RFCO 34)
 CCO 99 - Bike Path Details
 CCO 101 – Temporary T1 Tower stiffeners
 CCO 103 - Box Girder Axial Camber
 CCO 104 - Suspender Brackets

CCO 115 - Dacrement Coating
CCO 117 – Crossbeams and OBG bolted connections
CCO 126 - OBG and Cable interference at PP 112 (NOPC#5) (Excluding Field installation)

Executed Change Orders with Deferred time:

CCO 21 – OBG cross beam(OBG lifts 1-11 only and tower splice revisions.
CCO 50 - Hinge A reactions Shear Plates
CCO 56 - Suspender Loads
CCO 58 – Shipping Check Samples (CCO subsequently signed since CCO 108)
CCO 91 S0 and S1 - Additional NDT
CCO 97 - S wire
CCO 105 - Tower Fit Lugs

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CCO 108S1 - CCO v07 Oct8-09.doc

Unilaterally Executed Change Orders:

CCO 29 – Additional detailing for various RFI's
CCO 38 S0 – Crossbeam Kink and tower Splice Revisions (detailing)
CCO 89 S0 - Deck Panel Acceptance Criteria
CCO 89 S1 - Tack Weld Repair

Merit for the following NOPC's and RFCO's listed in Appendix A of CCO 108 S0 has not been determined at this time. However, the Contractor agrees that there will be no additional time associated with these issues. NOPC #11 (RFCO 33), RFCO 25, RFCO 31, RFCO 40, RFCO 48, and RFCO 51.

Increase in Bid Item at Item Price:

Time associated with Contract Bid Item 5, Time Related Overhead, will be increased by an additional 60 days. CCO 108 S0 previously provided an increase in time of 120 days. Payment for these 120 days and the additional 60 days will be included in this supplemental change order as an increase in quantity of time.

Increase in Bid Item at Item Price (180 x \$86,000/day= \$15,480,000.) \$15,480,000.00

Compensation of Direct Costs associated with the above pending CCO's.

Quantification of the direct costs of the above pending CCO's will be included in those specific change orders. Total cost of these specific changes will be reconciled with the advanced payment made in CCO 108 S0 through a future supplement to CCO 108.

Compensation of Indirect Costs for 180 day time extension and reconciliation of Item 3 CCO 108 S0

Item 3 in CCO 108 S0 is amended to read:

"Item 3 – Compensation of indirect cost associated with 180 days of project delay"

"It is recognized that certain RFIs and acts by the Department have contributed to delayed fabrication at the Steel Fabricator. This item represents an advanced payment to compensate the Contractor and Steel Fabricator for an estimated portion of the indirect cost for 180 days of indirect impacts to fabrication and the overall project (meaning in this context the additional overhead and shop space costs caused by delay). The full and final amount of such indirect costs will be included in a supplemental CCO."

Compensation of Contract Bid Item 5, Time Related Overhead, associated with the original 120 day extension is addressed in the Increase in Bid Item at Item Price listed above.

Quantification of any indirect costs have not been fully assessed by the parties at this time and will be included in future supplements less the adjustment of compensation at Lump Sum of \$21,200,000.00 previously provided in CCO 108 S0.

Waiver of Liquidated Damages and reconciliation of Item 4 in CCO 108 S0.

It is agreed by both parties that payment of Liquidated Damages for 90 days of delay will be waived. In the event that future increases in time exceeds 90 days in accordance with Bid Item 5, "Time Related Overhead" of the Special Provisions and Section 8-1.07, "Liquidated Damages" of the Standard Specifications, the relief of Liquidated Damages will be rescinded and actual payments for time and impacts will be compensated under separate change orders. The Relief of Liquidated Damages will be prorated accordingly if future extensions of contract time are less than 90 days.

Estimated Cost: Increase ☒ Decrease ☐ \$15,480,000.00

By reason of this order the time of completion will be adjusted as follows: 60 working days

Submitted by

Signature	Resident Engineer	Gary Pursell, Sup.T.E.	Date
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Approval Recommended by

Signature	Supervising Bridge Engineer	Richard Morrow, Sup.B.E.	Date
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Engineer Approval by

Signature	Principal Transportation Engineer	Peter Siegenthaler, Prin.T.E.	Date
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We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature	(Print name and title)	Date
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Settlement purposes only
CCO 108S1 - CCO v07 Oct8-09.doc

CONTRACT CHANGE ORDER MEMORANDUM

DC-CEM-4903 (OLD HC-39 REV. 6/93) CT# 7541-3544-0

DATE

TO Peter Siegenthaler, Principle Bridge Engineer		FILE 04-0120F4	
FROM Gary Pursell, Sup. T.E., Resident Engineer		04-SF-80-13.2/13.9	
CCO NO. 108	SUPPLEMENT NO. 1	CATEGORY CODE	CONTINGENCY BALANCE (including this change)
\$ 5,160,000.00		INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>	HEADQUARTERS APPROVAL REQUIRED? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
SUPPLEMENTAL FUNDS PROVIDED \$		IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	

THIS CHANGE ORDER PROVIDES FOR:

This supplemental change order (CCO 108s1) provides an additional 60 working day contract extension and resolves all time resulting from delay to permanent steel fabrication through May 20, 2009, and time associated with the CCOs listed in Appendix A of CCO 108 S0.

CCO 108 S0 and 108 S1 will provide ABF with a total of time extension of 180 days (6 months) and the new contract completion date will be October 7, 2013.

Background of Fabrication Delays at ZPMC

It is recognized that certain Change Orders, RFIs and other acts by the Department have contributed to fabrication delays at ZPMC facility in China. In January 2008, the project began to fall behind schedule due to delays in completion of the tower mock-ups and OBG fabrication. The tower mock-ups were the controlling operation through 2008. All three tower mock-ups were eventually accepted by January 7, 2009. After successful completion of the tower mock-ups, the controlling operation was T1 Tower fabrication, although OBG fabrication was near critical.

ABF's May 2009 CPM schedule showed a project delay of 292 days (10 months) beyond the contract completion date. The Department acknowledges responsibility for 2 months compensable time due to T1 Tower fabrication impacts and 4 months compensable time due to OBG fabrication impacts. But for the Departments disruptions to the tower mock-ups, discussed below, Tower fabrication would have been completed 2 months earlier and the OBG fabrication would have been the controlling operation.

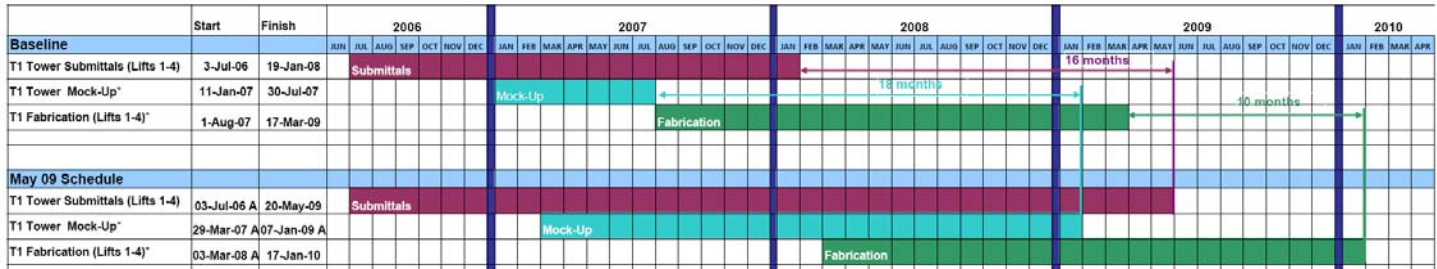
The total time extension of 180 days (6 months) provided in CCO 108 S0 and 108 S1 was due to delays in T1 Tower and OBG fabrication as described in the following two sections. The Department has acknowledged responsibility for 180 days of delay between May 2006 and May 2009.

T1 Tower Fabrication**Time Adjustment- 2 months Compensable**

The controlling operation during 2008 was the completion of Tower mock-ups. The contract requires that all three mock-ups (77M- Tower Diaphragm Type 3B, 89M-Tower Section, and 114M- Lift Erection Splice) are accepted before fabrication of permanent components can begin. Despite this requirement and to mitigate delays, the Department allowed certain aspects of tower fabrication to proceed as early as November 2007 (15 months prior to mock-up acceptance). It was realized in February 2008 that there were fabrication issues with regards to the tower fit-lug welds in the 77m and 89m Tower mock-ups. The fit lugs connect diaphragms to skin plates inside the tower. The fabricator encountered problems obtaining a consistent weld quality because the fit lugs are welded in a highly restrained weldment.

A change order (CCO 105) allowing modifications to the fit lug details was issued in May 2009. The fabricator had already begun fit-lug production per the contract plans for Lifts 1 and 2 when the CCO was eventually issued. Completion of the Tower Mock-ups took approximately 23 months, 16 months beyond the planned 7 month duration. The Department has acknowledged responsibility for approximately 2 months (November 2008-December 2008) of these delays. This compensable time extension is in recognition of time the Department has spent resolving welding details associated with the Tower mock-ups, including the fit lug welds and time spent resolving RFIs associated with T1 tower shop drawings and other welding issues. Figure 1 illustrates the extended durations of the Tower Mock-up operations.

Figure 1: Tower Fabrication Baseline Sched Vs. May 2009 Schedule



OBG Fabrication

Time Adjustment- 4 months Compensable

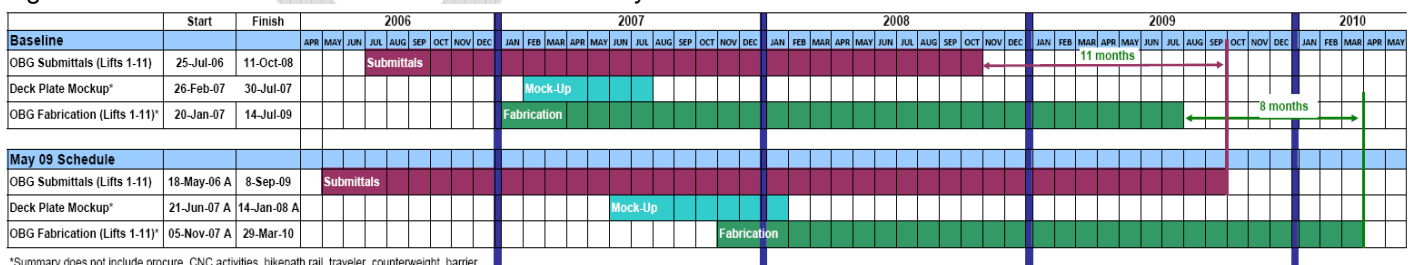
OBG fabrication was impeded by several Department actions including shop drawing delays, changes in approved drawings during fabrication, Contract Change Orders, and additional QA inspection delays. Deck panel fabrication began in February 2008 but was soon halted because weld monitoring tests (WMT) were not being performed as prescribed in the contract. The Contract requires that a WMT is performed and accepted before a welder is allowed to work on production panels. Therefore; ZPMC was producing panels that were subject to rejection. ABF and ZPMC claimed that the WMT acceptance criteria were subjective and unclear. The Department issued CCO 89S0 to provide clarification and specific measurable standards for the acceptance criteria (see CCO 89S0 below).

In April 2008 cracks in the closed rib tack welds were identified. The Department and ABF worked diligently to identify the cause and determine an appropriate remedial action, if necessary. An investigation was performed by the Department's weld specialist, Dr. John Fisher, and determined that tack weld cracking is not detrimental provided the weld penetration achieved the design required 80% minimum. The Department determined that if discontinuities were identified in the completed weld, phased array testing. The new Phased Array Ultrasonic Testing (PAUT) technology is not a recognized form of NDT per AWS D1.5 code but will be used to verify that the 80% weld penetration criteria is satisfied, otherwise, the weld is rejected and will require repair. Time associated with disruptions associated with additional testing criteria was deferred (See CCO 89S1, CCO 91S0 and CCO 91S1). CCO 108S1 resolves the time portions of these change orders.

The Department also directed ABF to perform 100% MT on the tack welds after the panel is on the jig and before the root pass is welded (See CCO 91S0 and S1). As of October 13, 2008 segments in the segment assembly stage of fabrication were waiting for deck panels. Deck super panels were placed on top of the deck segments with the ribs facing up so that cracks in the tack welds could be repaired. As of October 30, 2008, 429 deck panels were fabricated and approximately 70 completed PAUT testing and repair. PAUT testing and repair of deck panels impacted segment assembly operations. The back log of deck panels requiring PAUT testing created a storage problem so production of new deck panels decreased and ABF focused on working with the Department to get existing deck panels accepted and into the segment assembly stage of production.

OBG fabrication was also impacted by the Contractor's own issues including late start up of fabrication facilities, unrealized production rates and weld repairs. As shown in Figure 2, the overall delay to OBG fabrication is approximately eight (8) months. The Department acknowledges responsibility for approximately four (4) months of OBG fabrication delays associated with the above issues.

Figure 2: OBG Fabrication Baseline Schedule Vs. May 2009 Schedule



*Summary does not include procure, CNC activities, bikepath rail, traveler, counterweight, barrier

Change Orders Impacting Initial OBG Fabrication

The following is a description of the main change orders that impacted OBG fabrication:

CCO 38S1- Crossbeam Kink

The two parallel Orthotropic Box Girders (OBG) are connected along their length by 19 crossbeams. The crossbeams themselves are full depth orthotropic box beams that serve to tie the two OBG together as a structural unit. Details of the connections between the two OBG and the crossbeam provided in the contract plans depict them as parallel structures with co-planer OBG decks. However, due to differences in superelevation and profile grades between the two OBG, the crossbeams connecting the OBG's cannot be level. These crossbeams must be "kinked" and/or "twisted" in order for all components to connect at the proper grade and superelevation.

In October 2006, the Contractor was directed to relocate the kink to the edge of the OBG deck on top and back to the nearest floorbeam stiffener on the bottom, producing an offset in the kink from top to bottom. The Department altered the design of the crossbeam again in February 2007. The kinks in the crossbeams were located at the stiffeners within the crossbeams closest to the splice, near the location originally proposed by the Contractor. The west end crossbeams and all related drawings were re-detailed for a third time.

CCO 89S0- Deck Panel Acceptance Criteria

The current Special Provisions account for weld consistency, in part, by requiring that a test section of the U-rib weld be prepared at the beginning of each shift, referred to as a Weld Monitoring Test (WMT). The WMT must show a "quality similar to those originally developed" (in the weld trials and mock ups). However, as welding operations began, the weld quality demonstrated during the weld trials, mockups, and early WMT's was found to be inconsistent, and it became evident the definition of "quality similar to those originally develop" was difficult to define, subjective, and impractical to apply as acceptance criteria to WMT's, and hence production panels. Therefore CCO 89 S0 was issued to provide clear and specific acceptance criteria for WMTs and hence production panels, rather than referring to "quality originally developed." The clear and specific acceptance criteria provided positive assurance that the weld quality criteria contained in the contract documents is actually achieved in the completed production U-rib panels. Length and width of WMTs, as specified in the contract, do not allow consistency to be established. For example, 3 ribs vs. 5 ribs, longitudinal and transverse camber on a small plate is not the same as a production panel.

CCO 89S1- Additional Tack Weld Repair

Non-destructive testing (NDT) indicated some tack welds which connect the U-rib to the deck panel developed cracks prior to being incorporated into the final weld. Additional NDT testing of the final weld revealed some tack weld cracks were not being consumed during production welding as shown in the approved WPS. This condition does not meet the requirements of the Special Provisions and must be remedied. A thorough investigation by the Department included input from a number of welding specialists, a fatigue and fracture analysis engineer and the project's Seismic Safety Peer Review Panel (SSPRP). The investigation determined that tack weld cracking is not detrimental provided an approved repair procedure achieves the design required 80% minimum depth of penetration without defects. CCO 89S1 was issued to provide an alternative acceptance criteria for the repair of cracks found in some tack welds incorporated into the final U-rib deck panel welds.

CCO 91S0 and S1- Additional NDT

After reviewing the contract records, it was determined that a higher amount of Non-Destructive Testing (NDT) testing on the OBG and T1 Tower sections was required than originally anticipated. Additional NDT work included, but is not limited to the following:

- Performing Magnetic Particle Testing (MT) on the U-rib tack welds
- Procuring additional steel panels to perform NDT on the tack welds to assure they are not cracked prior to final welding
- Providing ultrasonic and phased array testing on the deck panels

Increase in Bid Item at Item Price

Time Related Overhead Bid Item 5 will be increased by 180 working days (120 + 60)
Increase in Bid Item at item price (180 x \$86,000/day= \$15,200,000.00)

Previously CCO 108S0 provided a lump sum compensation for 120 days. This change order corrected the method of payment for this item of work.

This adjustment of compensation at item price will be financed from the contingency fund.

This change order received concurrences from Peter Siegenthaler (Principal Construction Engineer), Ken Terpstra (Project Manager), and Jon Tapping (Division of Construction Coordinator). Maintenance concurrence is not required for this change.

This change order requires Headquarters and TBPOC approval.

CONCURRED BY:		ESTIMATE OF COST	
STRUCTURE REPRESENTATIVE	DATE	THIS REQUEST	TOTAL TO DATE
SR. BRIDGE ENGINEER	DATE	ITEMS	
FHWA REPRESENTATIVE	<div>This Section updated by CADb</div>	\$0.00	\$0.00
PROJECT ENGINEER Ken Terpstra			
OTHER (SPECIFY)			
	DATE	FEDERAL PARTICIPATION	
	DATE	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING	
		FEDERAL SEGREGATION (IF MORE THAN ONE FUNDING SOURCE OR P.I.P. TYPE) <input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS	
DISTRICT PRIOR APPROVAL BY	DATE	FEDERAL FUNDING SOURCE	PERCENT
HQ (ISSUE & APPROVE) (TO PROCEED) BY	DATE		
RESIDENT ENGINEER SIGNATURE	DATE		

HC-39 Word(Rev.9/96)

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** October 8, 2009

FR: Tony Anziano, Program Manager, Caltrans

RE: Agenda No. - 6a3
San Francisco-Oakland Bay Bridge Updates
Item- Self Anchored Suspension Superstructure
Contract Change Order #123 Supplement 0

Recommendation:
APPROVAL

Cost:
\$5,850,000.00

Schedule Impacts:
To Be Determined

Discussion:

Pursuant to instructions provided in the last TBPOC meeting, a change order to provide estimated compensation in the order of \$5,850,000 has been drafted. This change order will provide compensation to address the exposure in the development of shop drawings for the East End of the Orthotropic Box Girder (OBG); Lifts 13 and 14. Shop drawings for these elements have proved to be more difficult to develop than originally contemplated. This change order provides partial compensation to the Contractor for the additional work required to perform this work. A supplement to this change will be written to resolve costs when the shop drawings are completed.

The Department considers this change order a good business decision and recommends approval of this change. This change order will help bring the parties together, so as to bring this issue to a more timely resolution as it shows a good faith effort in recognizing impacts. In addition, this change order will help in the mitigation of potential interest claims related to this issue. This change order has been presented to the contractor and all indications are that this change will be signed and executed upon TBPOC approval.

Memorandum

Attachment(s):

Contract Change Order #123-S0

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 123 Suppl. No. 0 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

To: **AMERICAN BRIDGE/FLUOR ENTERPRISES INC A JOINT VENTURE**You are directed to make the following changes from the plans and specifications on the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Department of Transportation.**Description of work to be done, estimate of quantities and prices to be paid. (Segment)
Unless otherwise stated, rates for rental of equipment cover only such time as equipment is used.
The percentage shown is the net accumulated increase or decrease from the original quantity.**DRAFT**

CCO 123 - JRT 10-08-09

Adjustment of Compensation at Lump Sum:

Completion of acceptable east end (meaning Lifts 12 – 14) orthotropic box girder working drawings is contingent upon a variety of issues for which the Department or Contractor may be responsible, including, but not limited to, completeness of working drawing submittals, timeliness of preparation, submittal, review, and approval of working drawings, completeness of design, and clarifications and decisions involving constructability and construction means and methods. Completion of said working drawings is behind schedule and the responsibility for delay and the final cost impacts resulting therefrom have not been assessed and quantified by the parties. Until such time a determination is made with respect to the parties' responsibilities, and time and cost impacts quantified, this contract change order (CCO) is being issued to provide the Contractor estimated compensation for direct cost impacts attributable to the Department. It is agreed that detailing work subject to this change order will be billed at a rate of \$105 per hour all inclusive. It is currently estimated that such compensation will equal or exceed \$5,850,000.00

In accordance with the above, upon analysis and determination of 1) delay cause, 2) allocation of responsibility of the parties, and 3) effect impacts, estimated amounts paid pursuant to this CCO will be accounted for in any subsequent determination of responsibility and associated damages. When actual costs associated with the production of the east end orthotropic box girder working drawings have been ascertained, said amount shall be adjusted in a supplemental CCO, as appropriate. It is agreed that, prior to final resolution of cost and time impacts, the Contractor will provide supporting documentation for all direct costs in accordance with the Contract.

This CCO is issued based on a general non-binding statement of entitlement. Both parties agree that they are not, by signing this CCO, admitting any liability with respect to project plans, specifications, administration of contract, costs time or performance, or project duration, nor are they waiving any rights to claim adjustments in that regard. It is agreed compensation provided herein is not an acknowledgement of responsibility by the Department or an admission of Contractor entitlement for additional damages. Compensation provided by this CCO shall not be used by either party to assert any specific percentage of responsibility for any claim against the other party.

Adjustment of Compensation at Lump Sum \$5,850,000.00

Estimated Cost: Increase ☒ Decrease ☐ \$5,850,000.00By reason of this order the time of completion will be adjusted as follows: **Deferred****Submitted by**

Signature	Resident Engineer	Gary Pursell, Sup.T.E.	Date
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Approval Recommended by

Signature	Supervising Bridge Engineer	Richard Morrow, Sup.T.E.	Date
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Engineer Approval by

Signature	Principal Transportation Engineer	Peter Siegenthaler, Prin.T.E.	Date
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We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature	(Print name and title)	Date
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TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** October 8, 2009

FR: Tony Anziano, Program Manager, Caltrans

RE: Agenda No. - 6a3
San Francisco-Oakland Bay Bridge Updates
Item- Self Anchored Suspension Superstructure - Contract Change
Order #123, Supplement 1 – Incentive to Accelerate East End

Recommendation:
APPROVAL

Cost:
\$4,000,000.00

Schedule Impacts:
To Be Determined

Discussion:

Pursuant to instructions provided in the last TBPOC meeting, a change order to provide estimated incentive compensation in the order of \$4,000,000 has been drafted. This change order will provide an incentive to the contract to complete the East End Shop Drawings more quickly than currently scheduled. This change order will reduce the exposure in the resolution of issues related to the development of shop drawings for the East End of the Orthotropic Box Girder (OBG); Lifts 13 and 14. Shop drawings for these elements have proved to be more difficult to develop than originally contemplated.

The Department considers this change order a good business decision and recommends approval of this change. This change order is consistent with previous TBPOC mandates to consider and implement ways to expedite bridge opening. In addition is consistent with the Department's Risk Management Plans.

This change order has been presented to the contractor and all indications are that this change will be signed and executed upon TBPOC approval.

Memorandum

Attachment(s):

Contract Change Order #123-S1

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 123	Suppl. No. 1	TBA	Contract No. 04 – 0120F4	Road SF-80-13.2/13.9	FED. AID LOC.:
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To: **AMERICAN BRIDGE/FLUOR ENTERPRISES INC A JOINT VENTURE**

You are directed to make the following changes from the plans and specifications or drawings of this contract.

NOTE: This change order is not effective until approved by the Engineer.

Description of work to be done, estimate of quantities and prices to be paid. (Segregate items unless otherwise stated, rates for rental of equipment cover only such time as equipment is used. Percentage shown is the net accumulated increase or decrease from the original quantity.)

DRAFT**ABF 10-06-09 – JRT 10-9-09****Incentive Scheme providing Adjustment of Compensation at Unit Price:**

In addition to the \$5,850,000.00 Lump Sum compensation amount provided under Contract Change Order (CCO) No. 123S0, for the benefit of the project (and thus for the benefit of both the Department and the Contractor) the Department will compensate the Contractor with the following incentives to substantially complete Lifts 13W, 14W, and 14E shop drawings before each of the dates specified herein. In the best interest of minimizing delays and expediting the project schedule, Contractor will determine if and when it is appropriate to advance certain "approved" and "approved as noted" shop drawings for fabrication without further revision. For the purpose of this CCO, "substantially complete" shop drawings are defined as drawings or sheets that are either "approved" or "approved as noted" by the Department, and that the Department and the Contractor agree are in an appropriate state for release for fabrication to the Structural Steel Fabricator.

The release of "substantially complete" shop drawings for fabrication, when agreed to by the Department and Contractor pursuant to the above, shall not relieve the Department of design responsibility. The Department hereby acknowledges that the Contractor, its suppliers and subcontractors will not be held responsible for east end orthotropic box girder impacts resulting from any design changes ordered in writing by the Department and that were, for any reason whatsoever, omitted from any "substantially complete" shop drawing released for fabrication by the parties or that were ordered in writing by the Department after said release of "substantially complete" shop drawings for fabrication.

The Department will compensate the Contractor with the following incentives to finalize Lift 13W, 14W and 14E Shop Drawings on or before the dates indicated herein. The incentive mechanism in this CCO is not intended to have any impact or place any restraint on any entitlement the Contractor has to the direct cost impact of the delay to the final design development and preparation and approval of east end orthotropic box girder working drawings. Except for the payment entitlements set out below, the Contractor is not entitled to any incentive-based payment for achieving substantial completion of shop drawings within the time frames set out below.

For each **Lift 13W** shop drawing submitted prior to 5:00 pm (PST) on (date to be confirmed) that is subsequently determined to be "Approved" or "Approved as Noted" by the Engineer and agreed to be substantially complete, the Contractor will receive incentive compensation of \$ 650 per shop drawing sheet, not to exceed \$ 1,000,000.

The estimated Adjustment of Compensation at Unit Price.....\$ 1,000,000.00

For each **Lift 14E** shop drawing submitted prior to 5:00 pm (PST) on (date to be confirmed) that is subsequently determined to be "Approved" or "Approved as Noted" by the Engineer and agreed to be substantially complete the Contractor will receive incentive compensation of \$ 1,250 per shop drawing sheet, not to exceed \$ 1,000,000.

The estimated Adjustment of Compensation at Unit Price.....\$ 1,000,000.00

For each **Lift 14W** shop drawing submitted prior to 5:00 pm (PST) on (date to be confirmed) that is subsequently determined to be "Approved" or "Approved as Noted" by the Engineer, and agreed to be substantially complete, the Contractor will receive incentive compensation of \$ 1,250 per shop drawing sheet, not to exceed \$ 1,000,000.

The estimated Adjustment of Compensation at Unit Price.....\$ 1,000,000.00

If ninety-five per cent (95%) of the shop drawings for **Lifts 13W, and 14 (E and W)** that are not substantially complete by the dates set out above are agreed to be substantially complete before (date to be confirmed), the Contractor will be paid a lump sum of \$1,000,000.00.

The estimated Adjustment of Compensation at Unit Price.....\$ 1,000,000.00

Total Estimated Cost of this Change Order\$4,000,000.00

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 123 **Suppl. No.** 1 **TBA** **Contract No.** 04 – 0120F4 **Road** SF-80-13.2/13.9 **FED. AID LOC.:****Estimated Cost:** Increase ☒ Decrease ☐**By reason of this order the time of completion will be adjusted as follows:** Time Deferred**Submitted by**

Signature	Resident Engineer Gary Pursell, Sup.T.E.	Date
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Approval Recommended by

Signature	Supervising Bridge Engineer Richard Morrow, Sup.T.E.	Date
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Engineer Approval by

Signature	Principal Transportation Engineer Peter Siegenthaler, Prin.T.E.	Date
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We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature	(Print name and title)	Date
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Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** October 8, 2009

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 6b1
Item- San Francisco-Oakland Bay Bridge Updates
Yerba Buena Island Detour Update

Recommendation:

For Information Only

Cost:

N/A

Schedule Impacts:

N/A

Discussion:

A verbal update on the Yerba Buena Island Detour contract will be provided at the October 16th meeting.

Attachment(s):

N/A

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** October 8, 2009

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 6c1
Item- San Francisco-Oakland Bay Bridge Updates
Yerba Buena Island Transition Structures No. 1 - Addendum No. 7

Recommendation:
APPROVAL

Cost:
\$ 658,000

Schedule Impacts:
N/A

Discussion:

The items in Addendum No. 7 are shown on Attachment 1, titled "TBPOC Addendum List of Items". The master list of items planned for all addenda are shown in Attachment 2, titled "Addendum Item List, YBITS #1 Contract, Bid Opening December 15, 2009." One more addendum is planned after this one.

Addendum No. 7 includes seven separate items that cover approximately 67 plan sheet revisions. The PMT reviewed this addendum on September 21, 2009. All comments from BATA and CTC staff have been resolved and incorporated into this addendum.

Some of the key elements of this addendum are:

- To provide additional design requirements for false work at the ends of westbound and eastbound frame 2 to account for lateral displacement
- Revise plan sheets resulting from the Integrated Shop Drawing process

Memorandum

- An additional pull-box in order to allow for future electrical connection between the SAS and YBI superstructures
- Modify the design of a retaining wall due to a change in the profile of Southgate Road
- Incorporate the additional cost due to inflation and recent sales tax increase into the Document Management System

Attachment(s):

1. TBPOC Addendum List of Items
2. Addendum Item List, YBITS #1 Contract, Bid Opening December 15, 2009

TBPOC Addendum List of Items

Subject	Method for Incorporation into Project		Notes
	Bid Documents	Addendum/CCO/Other	September 2009
Risk response to falsework exposure		✓	Steel bolted space frame falsework designed for P-delta effects assuming 300mm of lateral displacement relative to the ground at the ends of EB and WB frame 2
Plan changes from ISD Analysis		✓	Required changes due to conflicts between steel reinforcing bars, and mechanical and electrical pipes within the YBI Transition structures
Reconfigure conduit routing due to changes from ISD Analysis		✓	Required changes due to conflicts between electrical conduits and steel reinforcing bars within YBI Transition structures
Add electrical pull box in barrier (Pull box added on east end of YBITS)		✓	In order to have a connection between SAS and YBI for future electrical work
Retaining Wall 50A		✓	The Southgate road profile was modified in YBI#2 contract
Document Management System - Revise Sole Source Price		✓	Due to inflation and increase in recent California sales tax
Curve data change		✓	Coordinate changes to a plan sheet

Addenda Item List
YBITS #1 Contract, Bid Opening 12/15/09 *

*Approved 5/7/09 TBPOC Mtg

Line No.	Target Delivery Dates														Status
	Item No.	Item Description	Owner	Plans (Sheets affected)	Specs	Estimate/Cost Impact? (Yes / No)	Consultant PS&E And ALL ITEMS DUE	Structure PS&E To District	PS&E To BATA, CTC, & DOE	Approval PMT Meeting Date	Approval BATA & DOE	Approval TBPOC Meeting Addendum Sign off & PS&E To HQOE	Publish	Addendum No.	
1	1	Change to Bid opening date to July 14, 2009	Mike Stone	No	Section 4	No	9/29/2008	NA	NA	10/14/2008	NA	10/15/2008	10/27/2008	1	Complete Addendum Published 10/24/08
2	2	Bike Path Details No. 1 remove "fiberglass" from grating callout.	Jal Birdy (JV)	Structural: Sheet 157	No	No	10/15/2008	10/29/2008	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
3	3	Add callouts for security fence to conform with roadway plans.	Jal Birdy (JV)	Structural: Sheet 6 of 17	No	No	10/15/2008	10/29/2008	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
4	4	Add Water Availability Clause	Trinh Lai	No	Yes	No	10/15/2008	NA	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
5	5	Add Geotechnical Report By Fugro dated 9/29/08 per SMohan	Trinh Lai	No	Edit SSP S5-280. Update Info H/O.	No	10/15/2008	NA	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
6	6	SCADA System. Update Spec for new technology and obtain price quote.	Brady Nadell (PB)	No	Yes	Yes	10/15/2008	NA	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
7	7	Upper Deck Polyester concrete overlay at eastern most end of the viaduct.	Jal Birdy (JV)	Sheets: SC-3, 3,4,23,25 of 209	Section 10-1.41 Section 10-1.70	Yes	10/15/2008	10/29/2008	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
8	8	Change sheet E-179. Add the word "Macalla road" to the plan sheet.	Trinh Lai	E-179	No	No	10/15/2008	NA	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
9	9	Changes to Gas Pipe specifications.	Trinh Lai	No	Gas Pipe	No	10/15/2008	NA	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
10	10	"Optional construction joint" at Hinge K	Mike Whiteside	Structural: WB Typical Section No. 7 & EB Typical Section No. 6	No	No	10/15/2008	10/29/2008	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
11	11	Class 1 Finish of Concrete	Steve Margaris	No	Concrete	Yes	10/15/2008	10/29/2008	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
12	12	EB Temp On-Ramp adjustments due to Advanced Work	Jal Birdy (JV)	Structural: Shts 1, 2, 5, 6, 7 of 13	No	Yes	10/15/2008	10/29/2008	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
13	13	Eliminate Reference to Temporary Construction Marine Access (Sheet C-5)	Trinh Lai	Sheet C-5	No	No	10/15/2008	NA	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
14	14	Change language in the specs for emergency access road from 24 hours to 1 hour. Access misspelled.	Trinh Lai	No	Yes	No	10/15/2008	NA	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
15	15	Add soil boring information on the goat hill area	Saba Mohan	Yes Sheets:LOTB & Br Plans Index	No	No	10/15/2008	10/29/2008	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
16	16	Change to Section 4 for # of days bid for designated portion of work 1	Mike Stone	No	Section 4	No	10/15/2008	NA	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09

Addenda Item List
YBITS #1 Contract, Bid Opening 12/15/09 *

*Approved 5/7/09 TBPOC Mtg

Line No.	Target Delivery Dates														Status
	Item No.	Item Description	Owner	Plans (Sheets affected)	Specs	Estimate/Cost Impact? (Yes / No)	Consultant PS&E And ALL ITEMS DUE	Structure PS&E To District	PS&E To BATA, CTC, & DOE	Approval PMT Meeting Date	Approval BATA & DOE	Approval TBPOC Meeting Addendum Sign off & PS&E To HQOE	Publish	Addendum No.	
17	17	Changes to Areas for Contractor's Use specifications. Change availability of Area PR and Area FP from 1/1/2010 to 5/1/2010.	Mike Stone	No	Yes Areas for Contractor's Use	No	10/15/2008	NA	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
18	18	Cover sheet/Index of sheets. Sheets 13 through 18 are missing.	Bob Zandipour	Yes Title Sheet	No	No	10/15/2008	NA	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
19	19	Change to Bid Book: Max Days & Cost per Day for "B" Bid	Mike Stone	No	Yes	No	10/15/2008	NA	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
20	20	Change to "Notice to Bidders" for max days bid	Mike Stone	No	Yes	No	10/15/2008	NA	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
21	21	Add Indemnification Specification.	Jon Tapping	No	Yes 5-1.40	No	10/15/2008	NA	11/12/2008	11/17/2008	12/23/2008	12/23/2008	12/30/2008	2	Complete Addendum Published 1/22/09
22	22	Contractor Outreach	Derek Pool	No	Yes	No	1/15/2009	NA	2/13/2009	?	3/9/2009	3/5/2009	3/12/2009	3	Complete Addendum Published 3/19/09
23	23	Change Bid Open date to December 15, 2009	Mike Stone	No	Yes "Notice To Bidders"	No	NA	NA	4/27/2009	5/4/2009	5/7/2009	5/7/2009	5/27/2009	4	Complete Addendum Published 5/27/09
24	24	Detection loop for SF proposed ramp/TOS.	Ellery, Sean Coughlin	Yes	No	Yes +\$45,600 (\$32,100+ \$13,500)	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
25	25	Eletrical Items a) Lightpipe concrete channel inserts stationing. b) Electrical conduits and penetrations for the future light. c) Light Pipe Limits on WB and EB	Brady Nadell (PB)	Structural: 1 sheet 84/209(633/806) Electrical: 28 sheets	Structural: None Electrical: None	Yes +\$70,700 (\$62,000+ \$8,700)	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
26	26	Deck Refinish EB and WB roadway on the YBITS structure to match Skyway. Add 3 bid items to BEES.	Mike Whiteside	Yes Gp redline typ.section sheet 84 of 209 (550/806)	Yes 10 1.41 CLEAN BRIDGE DECK (SSP 15CLDK), 10-1.695 BRIDGE DECK METHACRYLATE RESIN TREATMENT (SSP 54METH)	Yes +\$309,360 (\$61,560+ \$68,400+ \$179,400)	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
27	27	ISD Specification	Jon Tapping - ISD specs Francisco Carpio	No	Yes section 5-1.08	No	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
28	28	Working Drawing Submittal Schedule specification. Bid Item Revision.	Jon Tapping - ISD specs Mike Whiteside - As built	No	Yes section 10-1.035	Yes +\$2M	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
29	29	Enhance specifications to avoid dependency btwn EB & WB construction.	Mike Stone	No	Yes sections 4	No	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.

Addenda Item List
YBITS #1 Contract, Bid Opening 12/15/09 *

*Approved 5/7/09 TBPOC Mtg

Line No.	Target Delivery Dates														Status
	Item No.	Item Description	Owner	Plans (Sheets affected)	Specs	Estimate/Cost Impact? (Yes / No)	Consultant PS&E And ALL ITEMS DUE	Structure PS&E To District	PS&E To BATA, CTC, & DOE	Approval PMT Meeting Date	Approval BATA & DOE	Approval TBPOC Meeting Addendum Sign off & PS&E To HQOE	Publish	Addendum No.	
30	30	Maintenance of Local Roads	Bob Zandipour	No	No	Yes +\$0.5M for Supp Funds	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
31	31	Red line revisions of the utility plan sheets	Bob Zandipour	Yes	No	No	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
32	32	Change to Areas for Contractor's Use	Mike Stone	Yes Sheet 18/806 (C-6)	Yes Section 5-1.11	No	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
33	33	Award & Execution	Rob Kobal	No	Yes Section 3	No	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
34	34	OCIP specs	Rob Kobal	No	Yes Section 5-1.33	No	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
35	35	Bike Path Light Conduit & Bike Railing. Bid item revision.	Brady Nadell (PB) - Lighting & Elect. Jal Birdy (JV) - Bike Railing	Structural: Shts 162, 163, 164, & 165 (Bike Path Railing Det Nos 1, 2, 3 & 4). Roadway: Rdwy Lighting sht E-175	No	Yes Elect. - \$3,200	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
36	37	Indicate subsurface items constructed in YBITS advance & detour work.	Jal Birdy (JV)	No 59 shts in info handout	Yes 5-1.07	No	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
37	38	Update conduit and circuit schedules to reflect the electrical design changes.	Brady Nadell (PB)	Yes Revise 103 sheets.	No	No	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
38	39	Sound Control Requirements (Pile Driving)	Bob Zandipour Rob Kobal	No	Yes Section 5-1.19	No	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
39	40	Supplemental fund for USCG Transportation to be revised.	Rob Kobal	No	No	Yes + \$500,000	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
40	41	Vibration monitoring specs to be added. New bid item.	Rob Kobal	No	Yes 10-1.435	Yes. New bid item. + \$143,000	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
41	42	Photo Survey of Existing Facilities specs to be modified. Bid item revision.	Rob Kobal	No	Yes section 10-1.43	Yes + \$109,000	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
42	43	Cooperation specs to be modified.	Rob Kobal	No	Yes section 10-1.20	No	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.

Line No.	Target Delivery Dates														Status
	Item No.	Item Description	Owner	Plans (Sheets affected)	Specs	Estimate/Cost Impact? (Yes / No)	Consultant PS&E And ALL ITEMS DUE	Structure PS&E To District	PS&E To BATA, CTC, & DOE	Approval PMT Meeting Date	Approval BATA & DOE	Approval TBPOC Meeting Addendum Sign off & PS&E To HQOE	Publish	Addendum No.	
43	44	Maintaining Traffic specs to be modified.	Rob Kobal	No	Yes section 10-1.31	No	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
44	45	Call box anchorages for the entire YBI #1 project	Jal Birdy (JV)	Yes Sheet E-172A	No	No	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
45	46	Reduce the "Designated Portion of Work 1" duration to 780 days. Bid Book revision required.	Mike Stone	No	Yes. Sec. 4 Bid Book	No	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
46	47	Remove redundant light pole foundation specification.	Steve Margaris	No	Yes Section 10-3.21	No	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
47	58	"Cost Reduction Incentive Proposal" specification revision	Rob Kobal	No	Yes Section 5-1.09	No	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
48	59	"Payments" specification revision	Rob Kobal	No	Yes Section 5-1.18	No	4/17/2009	4/24/2009	5/13/2009	5/26/2009	6/4/2009	6/4/2009	7/21/2009	5	Complete Addendum Published 7/30/09.
49	36	Lighting west of Bent 48. Pole arrangement, foundation design, and concrete barrier. New bid item.	Bob - Clive - JV - PB	Yes Sheets E-174, Q-2, 790A/806, 790B/806, 790C/806	Yes 10-3.275, 10-1.41, 10- 1.77	Yes +\$62,980	6/19/2009	7/3/2009	7/20/2009	7/27/2009	8/7/2009	8/7/2009	8/20/2009	6	Complete Addendum Published 8/27/09.
50	51	Bridge Deck Tining: To reduce traffic noise specifications will be changed to require longitudinal tining as opposed to transverse required by current specification.	Steve Margaris / Ric Maggenti	No	Yes Section 10-1.59	No	6/19/2009	7/3/2009	7/20/2009	7/27/2009	8/7/2009	8/7/2009	8/20/2009	6	Complete Addendum Published 8/27/09.
51	52	Add: (1) Working drawing campus specification (2) Plot plan of pier 7 & Quit claim deed & real estate agreement to info H/O (3) New bid item to BEES	Rob Kobal	No Info Handout Item	Yes Section 10-1.036 Section 5-1.07 edit. Section 5-1.11 Section 5-1.18	Yes +\$1.2M Wrkg Drwg Campus	6/19/2009	7/3/2009	7/20/2009	7/27/2009	8/7/2009	8/7/2009	8/20/2009	6	Complete Addendum Published 8/27/09.
52	60	Add supplemental work fund "Mitigation Work for USCG"	Bill Casey	No	No	Yes +\$2,000,000	6/19/2009	7/3/2009	7/20/2009	7/27/2009	8/7/2009	8/7/2009	8/20/2009	6	Complete Addendum Published 8/27/09.
53	61	Add new bid item for "TEMPORARY SHUTTLE VAN SERVICE"	Rob Kobal	No	Yes 10-1.19	Yes + \$2.28M	6/19/2009	7/3/2009	7/20/2009	7/27/2009	8/7/2009	8/7/2009	8/20/2009	6	Complete Addendum Published 8/27/09.
54	62	USCG License	Bob Zandipour	No	Yes Info handout Section 5-1.07	No	6/19/2009	7/3/2009	7/20/2009	7/27/2009	8/7/2009	8/7/2009	8/20/2009	6	Complete Addendum Published 8/27/09.

Addenda Item List
YBITS #1 Contract, Bid Opening 12/15/09 *

*Approved 5/7/09 TBPOC Mtg

Line No.	Target Delivery Dates														Status
	Item No.	Item Description	Owner	Plans (Sheets affected)	Specs	Estimate/Cost Impact? (Yes / No)	Consultant PS&E And ALL ITEMS DUE	Structure PS&E To District	PS&E To BATA, CTC, & DOE	Approval PMT Meeting Date	Approval BATA & DOE	Approval TBPOC Meeting Addendum Sign off & PS&E To HQOE	Publish	Addendum No.	
55	63	Specification Updates	Laura Rubalcaba	No	Yes 10-1.69 10-1.70 10-1.57	No	6/19/2009	7/3/2009	7/20/2009	7/27/2009	8/7/2009	8/7/2009	8/20/2009	6	Complete Addendum Published 8/27/09.
56	64	Eliminate A+B Bidding	Mike Stone	No	Yes Notice to Bidders Section 4 BEES Change Bid Book Section 5-1.17 Section 10-1.17 Section 10-1.23	Yes BEES	6/19/2009	7/3/2009	7/20/2009	7/27/2009	8/7/2009	8/7/2009	8/20/2009	6	Complete Addendum Published 8/27/09.
57	50	Risk response to falsework exposure.	Mike Whiteside	No	Yes Section 10-1.59	Yes \$600,000 for Supplemental Funds	8/28/2009	9/4/2009	9/14/2009	9/21/2009	10/1/2009	10/1/2009	10/30/2009	7	On Schedule. All items submitted.
58	55	Plan changes from ISD Analysis	Ade Akinsanya	Yes - 45 Total Sheets: 7, 19, 32, 37, 38, 47, 48, 55, 56, 57, 58, 60, 62, 63, 64, 68, 69, 73, 74, 75, 76, 77, 78, 79, 80, 89, 97, 99, 100, 103, 111, 112, 113, 114, 115, 116, 119, 120, 121, 122, 123, 124, 134, 157, 163	No	No	8/28/2009	9/4/2009	9/14/2009	9/21/2009	10/1/2009	10/1/2009	10/30/2009	7	On Schedule. All items submitted.
59	56	Reconfigure conduit routing due to changes from ISD	Brady Nadell	Yes 181, 183, 197, 200, 204, 205, 221, 243, 245, 246, 249, 252	No	Yes +\$28,400 (\$32,450 - \$4,050)	8/28/2009	9/4/2009	9/14/2009	9/21/2009	10/1/2009	10/1/2009	10/30/2009	7	On Schedule.
60	57	Add electrical pull box in barrier. (Pull box added on West end of SAS. Construction requested pull box on East end of YBI)	Brady Nadell	Yes 171, 212, 365, 367, 385, 389	No	Yes +\$11,660	8/28/2009	9/4/2009	9/14/2009	9/21/2009	10/1/2009	10/1/2009	10/30/2009	7	On Schedule.
61	65	Retaining Wall 50A	Jal Birdy (JV)	Yes 13, 117 and 118 of 806	No	No	8/28/2009	9/4/2009	9/14/2009	9/21/2009	10/1/2009	10/1/2009	10/30/2009	7	On Schedule. All items submitted.
62	67	Document Management System - Revise Sole Source Price	Rob Kobal	No	Yes Section 5-1.18 "PAYMENTS" Section 10-1.25 "DOCUMENT MANAGEMENT SYSTEM"	Yes +\$18,010 (+3% mainly due to the year delay and the change in the new California Tax Rate.)	8/28/2009	9/4/2009	9/14/2009	9/21/2009	10/1/2009	10/1/2009	10/30/2009	7	On Schedule. All items submitted.

Addenda Item List
YBITS #1 Contract, Bid Opening 12/15/09 *

*Approved 5/7/09 TBPOC Mtg

Line No.	Target Delivery Dates														Status
	Item No.	Item Description	Owner	Plans (Sheets affected)	Specs	Estimate/Cost Impact? (Yes / No)	Consultant PS&E And ALL ITEMS DUE	Structure PS&E To District	PS&E To BATA, CTC, & DOE	Approval PMT Meeting Date	Approval BATA & DOE	Approval TBPOC Meeting Addendum Sign off & PS&E To HQOE	Publish	Addendum No.	
63	68	Curve Data Change To Plan	Bob Zandipour	Yes 6/806	No	No	8/28/2009	9/4/2009	9/14/2009	9/21/2009	10/1/2009	10/1/2009	10/30/2009	7	On Schedule. All items submitted.
64	48	Small Business Utilization Report require the contractor to submit a monthly utilization of small businesses and DVBE's. A form will be provided.	Derek Pool	No	Yes SB/DVBE specification	Yes \$'s for reports/forms	10/1/2009	10/8/2009	10/15/2009	10/26/2009	11/2/2009	11/2/2009	11/16/2009	8	In Progress. Attorney review pending.
65	53	Modify WB Structure to facilitate connection of the WB YBI Ramps to be constructed at a later date. Modifications include: 1) Additional Reinforcing a) dowels with couplers along the north edge of deck b) reinforcement (with couplers) at W9L and W5L c) reinforcement (with couplers) at diaphragms between W5L and W4L d) couplers at currently detailed reinforcement at cap of W4L & some diaphragms between W4L & W3L e) add inserts in the soffit slab to support extension of WB off ramp spine 2) Additional Concrete 3) Plan changes from ISD analysis	Jal Birdy (JV)	Yes, 37 sheets Revised 1-5, 18, 20, 21, 24, 29-31, 40, 42-46, 65, 66, 70-72, 84, 87, 96, 98 of 209, 550, 552 and 633 of 806 New 32A, 42A, 44A, 45A, 45B, 72A, 97A	No	Yes +\$688,650 (\$378,000 + \$310,650)	10/1/2009	10/8/2009	10/15/2009	10/26/2009	11/2/2009	11/2/2009	11/16/2009	8	In Progress. COOP Agreement Pending.
66	54	Specification changes due to SAS schedule evolution.	Mike Stone	No	Yes Areas for Contr's Use Section 5-1.11	No	10/1/2009	10/8/2009	10/15/2009	10/26/2009	11/2/2009	11/2/2009	11/16/2009	8	In Progress. Place holder to incorporate SAS changes.
67	69	Specification changes for Electrical Pull Box	Brady Nadell	No	Yes	Yes	10/1/2009	10/8/2009	10/15/2009	10/26/2009	11/2/2009	11/2/2009	11/16/2009	8	In Progress.

Status Legend:

Complete -

On Schedule -

In Progress -

Late -

Memorandum

TO: Toll Bridge Program Oversight Committee **DATE:** October 8, 2009
(TBPOC)

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 6d1
Item- San Francisco-Oakland Bay Bridge Updates
Oakland Touchdown No. 1 Update

Recommendation:

For Information Only

Cost:

N/A

Schedule Impacts:

N/A

Discussion:

A verbal update on the Oakland Touchdown No. 1 contract will be provided at the October 16th meeting.

Attachment(s):

N/A

Memorandum

TO: Toll Bridge Program Oversight Committee
(TBPOC)

DATE: October 8, 2009

FR: Bijan Sartipi, Director, Caltrans District 4

RE: Agenda No. - 7a

Item- Other Business
Eye Bar Update

Recommendation:

For Information Only

Cost:

N/A

Schedule Impacts:

N/A

Discussion:

A verbal update on the eye bar and related bridge inspections and maintenance will be provided at the October 16th meeting.

Attachment(s):

N/A